

---

# **SOCIAL ECONOMICS, POLICY AND DEVELOPMENT**

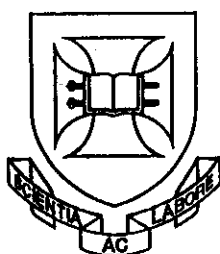
**Working Paper No. 5**

**Institutional Impediments, Entitlement Exchange  
And Women's Empowerment in Rural India:  
The Case of Access to Education**

by

**K.C.Roy, Clem Tisdell and A.Ghose**

**February 2000**



**THE UNIVERSITY OF QUEENSLAND**

ISSN 1442-8563  
**SOCIAL ECONOMICS, POLICY AND DEVELOPMENT**  
**(Working Paper)**

**Working Paper No. 5**

**Institutional Impediments, Entitlement Exchange  
and Women's Empowerment in Rural India:  
The Case of Access to Education\***

by

**K.C.Roy, Clem Tisdell and A.Ghose**

**February 2000**

© All rights reserved

---

\* Partly funded by ARC Large Grant 1999-2000. We are grateful to Ari Das for his assistance with finalizing this paper.

WORKING PAPERS IN THE SERIES, *Social Economics, Policy and Development* are published by the Department of Economics, University of Queensland, 4072, Australia. They are designed to provide an initial outlet for papers resulting from research funded by the Australian Research Council in relation to the project 'Asset Poor Women in Development', Chief Investigator: C.A. Tisdell and Partner Investigators: Associate Professor K.C. Roy and Associate Professor S. Harrison. However this series will also provide an outlet for papers on related topics. Views expressed in these working papers are those of their authors and not necessarily of any of the organisations associated with the Project. They should not be reproduced in whole or in part without the written permission of the Project Leader. It is planned to publish contributions to this series over the next few years.

For more information write to Professor Clem Tisdell, Department of Economics, University of Queensland, Brisbane 4072, Australia. (e-mail: [c.tisdell@economics.uq.edu.au](mailto:c.tisdell@economics.uq.edu.au))

**INSTITUTIONAL IMPEDIMENTS, ENTITLEMENT EXCHANGE AND WOMEN'S  
EMPOWERMENT IN RURAL INDIA:  
THE CASE OF ACCESS TO EDUCATION**

**Abstract**

Institutional impediments in rural India is the biggest hindrance to the socio-economic development of women. The universal measures of women's welfare like the Gender Development Index and the Gender Empowerment Measures do not take into account the social, cultural and traditional factors, the bondage of which is too strong to be ignored. Sen's work on endowment and entitlement exchange is the basis for all those indices. However, his theory and the indices based on those theories do not adequately account for the cultural impediments and the 'ideology of seclusion' which is the root cause for under development of women in rural hinterland. This paper analyses the impact of social cultural and traditional impediments through primary surveys of rural women. The analysis of survey results strongly suggests that the indices based on Sen's theory, which put so much emphasis on education, may turn out to be highly inappropriate in the absence of a social index which measures the cultural impediments along with the ideology of seclusion as the key factor.

**INSTITUTIONAL IMPEDIMENTS, ENTITLEMENT EXCHANGE AND WOMEN'S  
EMPOWERMENT IN RURAL INDIA:  
THE CASE OF ACCESS TO EDUCATION**

**1. INTRODUCTION**

Gender empowerment has been recognised as a key to the improvement of the women in developing countries. One of the main means for gender empowerment is education to women so that they utilise their qualification to gain employment, which in turn will lead to economic independence. Increase of one's educational qualification leads to enlargement of the endowment factor, which is a part of Sen's work. However, Sen's theory of exchange entitlement does not fully take into the account the various social and institutional factors, which hamper exchange. In this paper we are more concerned with the issues of women's education and how the educational endowment of women provides exchange entitlement factors different from those of men due to social, cultural and institutional factors. An in-depth analysis is provided from field surveys and with theoretical aspects discussed on the basis of Sen's theory. The shortcomings of the theory have been noted and alternative solutions have been suggested for the extension of the theory and its application.

**2. SEN'S EXCHANGE ENTITLEMENT, ENDOWMENT AND POVERTY  
RELATIONSHIP: A BRIEF REVIEW**

The entitlement relation as proposed by Sen (1981) is one kind of ownership relation which could be obtained by the following four methods: Trade based entitlement, production based entitlement, own-labour entitlement and inheritance or transfer entitlement. One can exchange for other things what one owns. This exchange can take place either through trading, production or a combination of the two. *The set of all the alternative bundles of commodities that a person can acquire in exchange of what he or she owns may be called the 'exchange entitlement' of what he or she owns.*

The concept of entitlement is an advanced application of modern set theory with 'exchange entitlement mapping' as the relation which mathematically specifies the set of exchange for each ownership bundle. The Exchange Entitlement Mapping' or E-mapping, as set out by Sen originally (Sen, 1981), in short helps to identify whether a man or a woman will be exposed to starvation; in other words whether the exchange entitlement for his or her

ownership could provide him or her with enough food. E-mapping specifies the exchange entitlement set of alternative commodity bundles for each endowment bundle.

The entitlement set of a person depends on two parameters, the endowment of a person (the ownership bundle) and the exchange entitlement. *The set of all such available commodity bundles in a given economic situation is the exchange entitlement of his endowment.*

Apart from the endowment or ownership factor, the key determinants of a person's welfare is his or her exchange entitlement. For example, labour is the natural endowment factor for most people, a part of the endowment set for them. However, the key factor for his/her welfare is whether he or she can find employment (this is whether he or she can exchange their endowment, or exchange entitlement), and if so, for how long and at what wage rate.

The exchange entitlement varies from person to person, based on his or her economic class structure as well as the modes of production of the particular economy. Even with similar endowment bundle, the exchange entitlement will vary depending on his or her economic prospects. For example, two people with same educational qualifications, in rural and urban areas will have different exchange entitlements. One of the main causes of rural urban migration is based on the entitlement exchange factor. One of the main factors in exchange entitlement differential is the gender factor. The gender factor, generically speaking, opens up a whole array of issues which have not been fully accounted for in Sen's theory of entitlement exchange.

With the gender issues now prevalent, and being one of the core issues of development, it is important that we combine the issue of development and the theory of entitlement. A host of issues come into play when we want to decide the factors of exchange entitlement of women. The issues are widely divergent, ranging from property rights to social customs, to gender empowerment measures for women's entitlement factors, to institutional and educational issues.

One of the main endowment factors in today's world is education, which is supposed to help one gain employment. The indicators for development as prescribed by World Bank and United Nations take into account the gross primary enrolment ratio for that purpose. However, education itself in the endowment set of a female doesn't necessarily improve her chances for exchange entitlement because of various social and institutional factors which are

related to traditional and cultural ideology. The *ideology of seclusion* plays a pivotal role in significantly reducing gainful employment for educated women in rural sector of India.

Due to traditional custom of getting married in the right age, which is quite early, importance of getting a job takes a backseat. Primary surveys have been conducted in the rural hinterland of India to investigate whether increasing the endowment factor, by way of education to women, will lead to higher exchange entitlement. The surveys conclude that social custom, institutional impediments and ideology of seclusion are the main obstacles in the entitlement factor.

### **SOME COMMENTS**

This endowment can lead to entitlements which when exchanged can lead to the removal of poverty and improvement in the socio-economic status of the individual on the assumption that there are no institutional deterrents to exchanging entitlements. Since these deterrents exist, endowment does not automatically lead to this exchange of entitlement.

Women tend to suffer from these institutional impediments more than men and among women, rural women suffer more than urban women<sup>1</sup>. Sen was aware of gender differences. In later work (Anand and Sen 1995), Sen has mathematically demonstrated that the exchange entitlement factor causes difference between male and female. However, he has not taken into account the institutional impediments, particularly the ideology of seclusion which is the key deterrent to the removal of poverty and empowerment of women in rural India.

---

<sup>1</sup> (Agarwal 1989; Bhalla 1989; Chen 1989; Duvvury 1989; Jodha 1986; Roy and Tisdell 1993 a, b; Roy and Clark 1994; Roy, Tisdell and Sen 1992, 1995; Roy and Tisdell 1996.)

## **WOMEN'S ACCESS TO EDUCATION, EMPLOYMENT AND THE FORCE OF INSTITUTIONAL IMPEDIMENTS**

### **Take the Case of Education**

Education is an endowment which enables a women to use the skill and knowledge to obtain the entitlements. But due to gender discrimination embodying the 'ideology of seclusion' less attention is paid to and less emphasis is placed on the education of girls and females than on that of boys and males. As a result, females in villages and rural towns do not get the opportunity to acquire the same marketable skill and knowledge as the males. Even if they get the same endowment (education), it does not necessarily improve their entitlement exchange capacity due to institutional impediments although it helps reduce the population growth in the long run by making them aware of the beneficial effects of late marriage, use of contraceptives and of having fewer children. Hence there is clear distinction between any education and appropriate marketable skills based education.

It is unfortunate that in the literature on women in development and on development studies in general (including Sen's study) such a distinction does not appear to have been made and the importance of skill based education in women's empowerment has not been discussed. Thus the failure of girls and women in general and of rural girls and women in particular to acquire the appropriate education they choose, stems from the most powerful institutional deterrents called the ideology of seclusion which is the most powerful component of what we broadly term 'cultural impediments'. Furthermore, considerable emphasis has been placed in the literature on primary education being the key to the success of women's empowerment process. Therefore, primary school enrolment ratio has been used as a proxy to test the success of government's primary education programs. But in India, in rural areas, the actual enrolment ratio in primary schools generally is considerably below the ratio reported in the official statistics. This situation exists due to certain cultural impediments which include lack of work ethics, sense of responsibility and duty on the part of teachers which allow them to stay away from school during the school hours for carrying on their private business and on the part of government officials which allow them not to implement the rules and regulations properly and to penalise the teachers. Also even when the teachers are present, they may not be discharging their duties – although the students will pass their subjects. Even when the



teachers impart adequate knowledge to their students, the education they obtain is mostly generalist and therefore does not help them in their empowerment process.

It should however be noted that female teachers possess better work culture, greater sense of responsibility and are more motivated than male teachers<sup>2</sup>. However in rural areas in India most primary schools are co-educational and are dominated by male teachers.

Parents also do not want to send their children to school due to these above noted factors as well as to the fact that the opportunity cost of sending children to school is loss of family income. These are all part of the same 'cultural impediment'. Hence education does not always lead to the success of women's empowerment process in presence of the cultural impediments. Hence Sen's theory and other studies on women in development do not seem to have recognised this fact.

## **WORLD BANK STUDY**

A World Bank (1991) study found that the following factors impede women's progress towards achieving higher education:

- (1) Parental and societal attitudes towards the education of their daughters are important factors in the non-enrolment and higher drop-out rates of female children in families which have very limited income, assets and low rank in the caste and occupational hierarchies. Parents of these girls are illiterate or semi-illiterate agricultural labourers, small farmers and artisan families or are urban slum dwellers working in unorganised sector in low status jobs.
- (2) Since the level of family income is very low, the children of these families, specially girls, are required to work both within and outside the home. Banerjee's study (1989) found that between 1971 and 1981, there was a sharp increase in female child labour in rural areas. While the absolute number of boys in the rural labour force went down by 8 percent, the number of girls increased by 30 percent.

---

<sup>2</sup> Obtained through private conversation with students and parents during the field survey.

- (3) The direct costs of education also deter families from sending their girls to school. Although there is no tuition fee for primary education in publicly funded schools, other expenses such as cost of books, other learning aids, uniforms and of transport can impose quite a heavy burden on poor families. Although some state-administered programmes offset some of the costs to scheduled castes and tribes, they do not cover all poor families.
- (4) Another important factor is the social perception about the return expected from girls' education. Since a girl once born will eventually get married, there is no long term return expected from investment in girls' education. Hence for their future role as mother and unskilled workers, girls require little formal education.
- (5) Also the way the school system is run does not seem to provide an incentive to parents to send their children to school. Thus inconvenient location of schools, absence of teachers, irregular functioning of schools, lack of basic minimum facilities such as blackboards, benches, table, chair etc., and single teacher school, exert a demoralising influence on parents' mind.
- (6) Also there is a particular scarcity of female teachers which affects girls' attendance at schools.

Although the research (Tilak:1987; Schultz:1993) indicates that investment in girl's education yields higher returns, gender disparities appear to be high in household expenditure on education. Among the students receiving tuition fee-free primary education girls are better placed. But the number of boys receiving partial or total exemption from payment of tuition fees are proportionately higher than girl students(Tilak:1996). A study by the National Sample Survey Organisation (1991) found that amount of scholarship received per student in rural areas was considerably lower for girls than for boys. A study by the National Council of Applied Economic Research(1994) found the presence of discrimination against the girls in household expenditure on education.

## The Other Side of the Story

However, extensive fieldwork in rural hinterlands and in tribal belts in West Bengal, and private discussions and personal interviews with tribals reveals that there are other forces which work against women's empowerment, but which the World Bank failed to recognise.

## COST OF AND THE SECONDARY MARKET FOR EDUCATION

The cost of education is high because there is gross inefficiency in the use of funds. A substantial part of the budgetary allocation to education is spent on wages and salaries of academic and non-academic staff in primary, secondary and tertiary institutions. A vast proportion of total income of educational institutions is derived from government grants which in 1985–86 accounted for 87.7 percent of total funds available for expenditure by educational institutions (Government of India 1995).

Primary and secondary education are the responsibility of state governments. The following table shows that the total state government expenditure on education which was only Rs 68.8 billion in 1984 accounting for 22.7 percent of total expenditure reached Rs 205.3 billion in 1991 accounting for 23.2 percent of total expenditure of states.

**Table 1: Expenditure on Education by State Governments**

|  | 1984  | 1985  | 1986  | 1987  | 1988  | 1989  | 1990  | 1991  |
|--|-------|-------|-------|-------|-------|-------|-------|-------|
| 1. Total expenditure of all State Governments (Rs billion) | 302.5 | 348.9 | 402.9 | 475.1 | 541.1 | 619.8 | 740.5 | 884.4 |
| 2. Total expenditure on education (Rs billion)             | 68.8  | 82.2  | 91.7  | 107.0 | 126.8 | 157.0 | 183.4 | 205.3 |
| 3. 2 as % of 1   | 22.7  | 23.6  | 22.8  | 22.5  | 23.4  | 25.4  | 24.8  | 23.2  |

Source: IMF (1994) *Government Finance Statistics Year Book 1997*, Washington D.C.: IMF

Hence the higher cost of education cannot be due to low level of expenditure by government on education. This is due among other things to the fact that in India, although formal state schools, which absorb the overwhelming bulk of students, represent the primary education market, very little education is provided in these schools particularly in rural areas. Teachers in both rural and urban areas tend to provide the same education in the secondary education market through large scale private coaching. Thus while teachers earn comfortable salaries in primary market and even more than 100 percent of their salaries in the *secondary* market, the parents are forced to bear the cost of enrolment in the formal market and the cost of teaching in the secondary market. Small farmers, tribals and scheduled caste families as well as low caste families doing odd jobs in informal sector in towns cannot afford such expenses. School and college teachers also belong to powerful unions and no government dares to flex muscles against these unions. Hence degeneration of the educational system continues (revealed through private conversation with tribal elders during fieldwork).

Contrary to the general belief that households do not spend much on primary education which is being provided free to every student, recent studies(Panchmukhi:1990;NCAER:1994) found that households spend a considerable amount on primary education. The NCAER(1994) study covering 15000 households in 15 major states in India found that households incur huge expenditure on elementary education.

### **PREVIOUS FIELD STUDY 1993**

A 1993 field study by K. C. Roy (Roy and Tisdell, 1994) reveals that 93 per cent of all females interviewed agreed that lack of technical skill and knowledge limited their scope for employment of educated females. Also 79 per cent of them agreed that if guidance and opportunities were given to them, they would have completed technology-oriented degrees. Fifty-six percent of the respondents agreed that male members in the family were given such guidance and help. Furthermore, more than 97 per cent of them agreed that information about the availability of technology, adequate facilities for training, credit to obtain and utilise technology would improve their access to technology which in turn would help them become economically independent.

Through private conversation, a number of respondents also revealed that even if girls and females in rural areas (villages and rural towns) receive education appropriate to their empowerment process they would be unable to utilise their education because the ideology of seclusion would prevent them from obtaining information about employment opportunities and from moving out of the confines of their surroundings in search of effective employment. In the same 1993 study more than 97 per cent of respondents agreed that equal opportunities with males is necessary for the employment of females. Thus even if all the factors conducive to the progress of education and thereby to the empowerment process of rural women are present, derogatory customs embodying gender discrimination do prevent girls and females from achieving success in their empowerment efforts. They also mentioned that the type of education that girls and young females receive in villages and rural towns does not depend on what they consider appropriate to their empowerment process but on what is available within the proximity of their towns (even if that is inappropriate) and what family elders force them to take. Apart from the ideology of seclusion, poor economic status of rural families also prevent them from sending their female children to institutions located at distance places.

### **FIELD STUDY (1994–95)**

One of the present authors (K. C. Roy) undertook a field study in a tribal area in rural West Bengal in recent past. It consisted of one survey of all girl students in class X (in exit year) in a secondary school. These students consisted of both tribal and non-tribal girls. The second survey interviewed all the female university graduates in that tribal region. This tribal region is in Midnapore district which is a part of Bengal, Orissa and Bihar tribal belt in India.

### **FIELD SURVEY I: SURVEY OF ALL STUDENTS IN THE TOP CLASS IN A GIRLS' SECONDARY SCHOOL IN A TRIBAL REGION IN MIDNAPORE DISTRICT**

The objective was to find out (i) the reasons for pursuing their current study; (ii) the influences of derogatory customs on the type and level of education they obtain;

(iii) the effect of ideology of seclusion on the prospect of obtaining employment; (iv) the influence of customs on marriage; and (v) the severity of the force of 'classic patriarchy'.

All students in grade X, which was the exit year for students for that school, were interviewed. After completing grade X, the students would have had to enrol in a higher secondary school or a college to complete grade XI and XII. These institutions are located at distant places. Some of the girls would have had to travel long distance every day or to stay at the school hostel. Such a move would have involved substantial expenditure on the part of the families and violated the rule of the ideology of seclusion. Total numbers of students interviewed was 90, of whom 31 were from tribal and scheduled caste families and 59 from upper caste families.

The results of the survey are presented in Table 2.

The results of an earlier fieldwork summarised in previous paragraphs have already indicated that the type of education that women and girls were getting was not suitable for obtaining employment and therefore for the success of empowerment process. Now this fieldwork gives a better picture of the usefulness of education that girls in the rural hinterland are receiving.

**Table 2: Issues in Girls' Education and the Impact of Gender Discrimination**

| Items<br>(1)  | Girls of scheduled caste and tribal families |                           |                 |                                   |                      | Girls of upper caste families |                 |                                   |                       |                      | Grand total of all castes |                              |  |  |  |
|---|--|---------------------------|-----------------|-----------------------------------|----------------------|-------------------------------|-----------------|-----------------------------------|-----------------------|----------------------|---------------------------|------------------------------|--|--|--|
|   | Total respondent (2)                         | Yes response (3)          | No response (4) | Yes/No as % of 2 (5)              | Total respondent (6) | Yes response (7)              | No response (8) | Yes/No as % of 6 (9)              | Total respondent (10) | Yes response (11)    | No response (12)          | Yes/No as % of 10 (13)       |  |  |  |
| 1. Reasons for pursuing current study<br>i) institutions close by home<br>(ii) very little expense for parents<br>iii) parents wanted it<br>iv) you wanted some kind of education<br>v) others – specify. | 31   | 30<br>28<br>24<br>30<br>— | —               | 96.8<br>90.3<br>77.4<br>96.8<br>— | 59                   | 53<br>53<br>35<br>58<br>—     | —               | 89.8<br>89.8<br>59.3<br>98.3<br>— | 90                    | 83<br>81<br>59<br>88 | —                         | 92.2<br>90.0<br>65.6<br>97.8 |  |  |  |
| 2. Against the forces of social customs which enforce ideology of seclusion, would you pursue further studies at distant institution?   |  |                           | 29              | 93.5                              |                      | 47                            |                 | 79.7                              |                       |                      | 76                        | 84.4                         |  |  |  |
| 3. Would you pursue such further studies is such social customs do not exist?   |  | 30                        |                 | 96.8                              |                      | 59                            |                 | 100.0                             |                       | 89                   |                           | 98.9                         |  |  |  |
| 4. Derogatory social customs and traditions embodying gender discrimination greatly influence the type and level of education.  |  | 30                        |                 | 96.8                              |                      | 59                            |                 | 100.0                             |                       | 89                   |                           | 98.9                         |  |  |  |
| 5. You prefer late marriage because you want to pursue further studies and acquire greater skills for obtaining employment.   |  | 25                        |                 | 80.6                              |                      | 55                            |                 | 93.2                              |                       | 80                   |                           | 88.9                         |  |  |  |
| 6. Customary practice of marriage prevents you from realising your full potential.  |  | 30                        |                 | 96.8                              |                      | 59                            |                 | 100.0                             |                       | 89                   |                           | 98.9                         |  |  |  |
| 7. Being female, it prevented you from taking job oriented education instead of generalist education  |  | 31                        |                 | 100.0                             |                      | 59                            |                 | 100.0                             |                       | 90                   |                           | 100.0                        |  |  |  |
| 8. Discontinuing the traditional system of marriage without free choice is essential for the fuller development of women and society  |  | 30                        |                 | 96.8                              |                      | 59                            |                 | 100.0                             |                       | 89                   |                           | 98.9                         |  |  |  |

*Table 2 continued on next page*

Table 2 continued

|   | Girls of scheduled caste and tribal families |      |    | Girls of upper caste families |    |      | Grand total of all castes |  |      |
|---|--|------|----|-------------------------------|----|------|---------------------------|--|------|
|   |  |      |    |                               |    |      |                           |  |      |
| 9. Who of the following enforces gender discrimination? |  |      |    |                               |    |      |                           |  |      |
| i) village and family elders rather than youngsters     | 30   | 96.8 | 45 | 76.3                          | 75 | 83.3 |                           |  | 83.3 |
| ii) amongst elders females compared with males          | 30   | 96.8 | 49 | 83.0                          | 79 | 87.8 |                           |  | 87.8 |
| iii) narrow minded younger females                      | 9  | 29.0 | 22 | 37.3                          | 31 | 34.4 |                           |  | 34.4 |



## **Analysis of Survey I Results**

For the question: reasons for pursuing current study, 96.8 per cent of girls from scheduled caste (S.C.) and scheduled tribes (S.T.) families and 89.8 per cent of upper caste (U.C.) families agreed that institutions close by home was one reason. The total affirmative response was 92.2 per cent.

To the second reason: very little expense for parents, 90.3 of S.C. and S.T. girls and 89.8 per cent of U.C. girls gave affirmative response. The total affirmative response was 90.20 per cent.

To the third reason: parents wanted it, 77.4 of S.C. and S.T. girls and 59.3 per cent of U.C. girls gave affirmative response. the total affirmative response was 65.6 per cent.

To the fourth reason: you wanted some kind of education, 96.8 per cent of S.C. and S.T. girls and 98.3 per cent of U.C. girls gave affirmative response. The total affirmative response was 97.8 per cent. There was no response to any other factors. Thus all the four factors played their part in leading the girls to take some formal education. No one mentioned that this education was appropriate and necessary for the success of their empowerment process. These girls also wanted some kind of education whatever the local institution can offer.

93.5 per cent of girls of S.C. and S.T. families and 79.7 per cent of girls of U.C. families reported that against the forces of social customs which confine them within the surroundings of their homes, they would not pursue further studies at a distant institution. This result is quite surprising because gender discrimination is generally more strictly imposed on girls in U.C. families than in S.C. and S.T. families. In answer to the question as to whether they would pursue such further studies if such social customs do not exist, 96.8 per cent of girls of S.C. and S.T. families and 100 per cent of girls of U.C. families reported they would. The total affirmative response was 98.9 per cent.

In response to the question as to whether derogatory social customs and traditions embodying gender discrimination greatly influence the type and level of education they receive, 96.8 per cent of girls of S.C. and S.T. families and 100 per cent of girls of U.C. families reported in the affirmative. The total affirmative response was 98.9 per cent.

When asked whether they would prefer late marriage because they would want to pursue further studies and acquire greater skills for obtaining employment, 80.6 per cent of S.C. and S.T. girls and 93.2 per cent of U.C. girls said 'yes'. The total affirmative response was 88.9 per cent.

When asked whether customary practice of marriage prevents a girl from realising her full potential, 96.8 per cent of S.C. and S.T. girls and 100 per cent of U.C. girls replied in the affirmative. The total affirmative response was 98.9 per cent.

To the question: being female, it prevented you from take job oriented education instead of generalist education, 100 per cent of S.C., S.T. as well as U.C. girls replied 'yes'. Naturally the total yes response was 100 per cent.

Also 96.8 per cent of S.C. and S.T. girls and 100 per cent of U.C. girls agreed that discontinuing the traditional system of marriage without free choice is essential for the fuller development of women and society. The total 'yes' response was 98.9 per cent.

When asked which of the three categories of people: (i) village and family elders, (ii) amongst elders, females rather than males and (iii) narrow minded younger females, enforces greater gender discrimination, the first category received 96.8 per cent affirmative response from S.C. and S.T. girls and 83 per cent affirmative response from U.C. girls. The total affirmative response for this category of people was 83.3 per cent. For the second category of persons, the affirmative response rate for S.C. and S.T. girls was 96.8 per cent and for U.C. girls was 76.3 per cent. The total affirmative response was 87.8 per cent.

For the last category of persons, the affirmative response rate was very low. Therefore, it would appear that while both village and family elders enforce gender restrictions on girls and women, female elders rather than male elders appear to be the principal actors in enforcing the ideology of seclusion on them.

Thus the results of the fieldwork support the argument that very little education is provided in educational institutions in rural areas, that the girls receive a particular education because the educational institutions are close by their homes, the expense is not high and parents want this education not because this education is helpful to them in their empowerment process.

Moreover, even if appropriate education is available at an institution located at a distant place, they cannot utilise that opportunity because of the enforcement on them of the ideology of seclusion.

Even if they receive such appropriate education they are unable to utilise this education to become economically independent because the social custom of parents arranging the marriage of their daughter as soon as they can and of daughters having no say in their own marriage.

Parents who fail to arrange successfully the marriage of their daughter tend to suffer from social humiliation.

The present system of formal education therefore has helped women and girls very little in their empowerment process. Appropriate education cannot be attained and empowerment process cannot be successful unless the quality of education is improved and derogatory social customs affecting women's empowerment are eliminated.

## **FIELD SURVEY 2: SURVEY OF ALL FEMALE UNIVERSITY GRADUATES (TRIBALS AND NON-TRIBALS) IN A TRIBAL REGION IN WEST BENGAL**

The female graduates interviewed were from upper castes, scheduled tribes and scheduled castes. All female graduates of that region were interviewed. The objective of this survey was to find out their perception of the influence of their education and of social customs on their empowerment process. Thus the views of both current female students and of those who already completed their degrees are presented to get a clearer picture of the influence of education on the whole process of endowment, entitlement and empowerment of women in rural India. The results of this survey are presented in Table 3.

**Table 3: Social and Cultural Impediments to Exchange Entitlement for Educated Rural Women**

| Items  | Scheduled Caste |     |       | Scheduled Tribe |     |       | Upper Caste |     |       | Grand total of all castes |     |      |
|--|-----------------|-----|-------|-----------------|-----|-------|-------------|-----|-------|---------------------------|-----|------|
|  | total           | yes | %     | total           | yes | %     | total       | yes | %     | total                     | yes | %    |
| 1. Marriage age preference                                     | 9               |     |       | 13              |     |       | 15          |     |       | 37                        |     |      |
| Late   |                 | 7   | (77)  |                 | 9   | (69)  |             | 12  | (80)  |                           | 28  | (76) |
| Early  |                 | 2   | (22)  |                 | 4   | (31)  |             | 3   | (20)  |                           | 9   | (24) |
| Reasons for late marriage                                      |                 |     |       |                 |     |       |             |     |       |                           |     |      |
| 1. Pursuit of higher studies                                   |                 | 8   | (88)  |                 | 9   | (69)  |             | 13  | (86)  |                           | 30  | (81) |
| 2. Economic independence                                       |                 | 8   | (88)  |                 | 9   | (69)  |             | 13  | (86)  |                           | 30  | (81) |
| 3. Children preference   |                 | 8   | (88)  |                 | 9   | (69)  |             | 13  | (86)  |                           | 30  | (81) |
| 4. Small family preference                                     |                 | 8   | (88)  |                 | 9   | (69)  |             | 13  | (86)  |                           | 30  | (81) |
| 2. Late marriage consequences                                  |                 |     |       |                 |     |       |             |     |       |                           |     |      |
| 1. Parents criticised  |                 | 8   | (88)  |                 | 10  | (77)  |             | 8   | (53)  |                           | 26  | (70) |
| 2. Ill treatment   |                 | 8   | (88)  |                 | 10  | (77)  |             | 9   | (60)  |                           | 27  | (73) |
| 3. Marriage a social responsibility                            |                 | 8   | (88)  |                 | 10  | (77)  |             | 9   | (60)  |                           | 27  | (73) |
| 4. Full potential hampered                                     |                 | 9   | (100) |                 | 10  | (77)  |             | 14  | (93)  |                           | 33  | (89) |
| 5. Prefer freedom of choice                                    |                 | 9   | (100) |                 | 10  | (77)  |             | 14  | (93)  |                           | 33  | (89) |
| 3. Employment  |                 |     |       |                 |     |       |             |     |       |                           |     |      |
| 1. Application of education                                    |                 | 9   | (100) |                 | 13  | (100) |             | 15  | 100   |                           | 37  | 100  |
| 2. Obtaining employment by education                           |                 | 9   | (100) |                 | 13  | (100) |             | 15  | 100   |                           | 37  | 100  |
| 3. Ideology of seclusion an obstruction?                       |                 | 9   | (100) |                 | 13  | (100) |             | 15  | 100   |                           | 37  | 100  |
| 4. Social custom an obstacle?                                  |                 | 9   | (100) |                 | 13  | (100) |             | 15  | 100   |                           | 37  | 100  |
| 5. Freedom of movement a problem?                              |                 | 9   | (100) |                 | 13  | (100) |             | 15  | 100   |                           | 37  | 100  |
| 6. Independent venture difficult due to ideology of seclusion? |                 | 9   | (100) |                 | 13  | (100) |             | 15  | 100   |                           | 37  | 100  |
| 4. Social Mobility   |                 |     |       |                 |     |       |             |     |       |                           |     |      |
| 1. Freedom of movement necessary?                              |                 | 2   | (22)  |                 | 13  | (100) |             | 15  | (100) |                           | 30  | (81) |
| 2. Family allows it?   |                 | 4   | (44)  |                 | 2   | (15)  |             | 7   | (46)  |                           | 13  | (35) |
| 3. Taunting problem  |                 | 8   | 88    |                 | 6   | (46)  |             | 5   | (33)  |                           | 19  | (51) |
| 4. Slander and gossip  |                 | 8   | (88)  |                 | 8   | (61)  |             | 6   | (40)  |                           | 22  | (59) |
| 5. Parent subjected to gossip                                  |                 | 8   | (88)  |                 | 10  | (77)  |             | 7   | (46)  |                           | 25  | (67) |
| 6. Parents criticised by grandparents                          |                 | 8   | (88)  |                 | 10  | (77)  |             | 8   | (53)  |                           | 26  | (70) |
| 7. Becoming liability for family?                              |                 | 9   | (100) |                 | 10  | (77)  |             | 8   | (53)  |                           | 27  | (73) |
| 5. Gender discrimination                                       |                 |     |       |                 |     |       |             |     |       |                           |     |      |
| 1. Gender discrimination biggest hindrance                     |                 | 9   | (100) |                 | 10  | (77)  |             | 14  | (93)  |                           | 33  | (89) |
| 2. Neighbours and elders                                       |                 | 9   | (100) |                 | 6   | (46)  |             | 6   | (40)  |                           | 25  | (68) |
| 3. Females vs males  |                 | 9   | (100) |                 | 9   | (69)  |             | 14  | (93)  |                           | 32  | (86) |
| 4. Younger females   |                 | 9   | (100) |                 | 9   | (69)  |             | 8   | (53)  |                           | 26  | (70) |

## **FIELD SURVEY 2: SURVEY OF ALL FEMALE UNIVERSITY GRADUATES (TRIBALS AND NON-TRIBALS) IN A TRIBAL REGION IN WEST BENGAL**

Regarding the issue of preferred marriage age, 77% of the scheduled caste women and 69% of the schedule tribe women said that they would prefer marrying at a late age, that is, after the age of 25. However, 86% of the upper caste women prefer marrying late.

The various reasons for marrying late are as follows:

1. They want to pursue higher studies and acquire greater skills for obtaining employment.
2. They want to use their educational skills for economic independence.
3. Probability of having a larger number of children is higher with early marriage, which will leave them less time for work.

88% of the scheduled caste women, 69% of the scheduled tribe women and 88% of the upper caste women agree to these points. In total 81% of all the women surveyed agree to the following reasons.

However they are very much aware of the late marriage consequences. One of the main problems is that their parent will be criticised. 88% of the scheduled caste women, 77% of the scheduled tribe women and 53% of the upper caste women agree to that fact that their parents will have to face criticism. In total almost 81% of the total women surveyed agree to this social problem.

Apart from parents being criticised, the women themselves are susceptible to ill treatment by their family members and neighbours. 88% of the scheduled caste women, 77% of the scheduled tribe women and 53% of the upper caste women agree to this facet. In all 73% of all the women are afraid of being treated badly.

To most women, and their parents, marriage becomes a social responsibility, rather than the welfare and happiness of the daughter. 88% of the scheduled caste, 77% of the scheduled tribe and 60% of the upper caste women agree with this point of view. In total 73 per cent of the women surveyed agree to this.

However, 89% of all the women surveyed agree to the fact that customary marriage prevent them from realising their full potential. 100% of the scheduled caste, 77% of the scheduled tribe and 93% of the upper caste women support this view.

Therefore, the same 89% of women also strongly support the fact that traditional practice of marriage should be discontinued, and freer choice are essential for the fuller development of women.

### **EMPLOYMENT:**

In regard to the questions relating to the issue of employment, 100% of women from every caste agree to the statements as given below:

1. They would like to make their education useful in their single as well as their married life.
2. They consider obtaining employment to be the most important and effective way of making their education useful.
3. They agree to the fact being girls and women, elders will impose the 'ideology of seclusion' on them, as a result job prospects and vacancies do not easily reach them.
4. Social customs prevent them from journeying to distance places in search for employment.
5. Even if they manage to get a job, they might be forced to turn down the offer as their movements are mostly confined to the surrounding of their home.
6. Ideology of seclusion has kept their latent qualities relatively undeveloped and as a result they are unable to follow some independent profession or start some commercial venture.

7. Being female prevented them from taking some job-oriented education instead of generalist education.

It is important to note, that irrespective of high and low caste, all the women agree to the above mentioned points of view. Therefore, increasing their endowment set will not lead to entitlement exchange and removal of poverty until those social and institutional problems are removed.

## **SOCIAL MOBILITY**

One of the first points in social mobility factor is how importantly it is viewed by the educated rural women. In other words is it necessary for them to have the freedom to move freely to meet and communicate with people to utilise opportunities for their development?

100% of the scheduled tribe women and 100% of the upper caste women say that it is necessary. Surprisingly only 22% of the scheduled caste women think it is necessary. 44% of the scheduled caste women 15% of the scheduled tribe women and 46% of the upper caste women said that their family allowed the necessary freedom of movement. In total only 35% of the women said that their family allowed them the necessary freedom of movement. That is in the case of educated rural women in India, 65% of the women are not allowed the necessary freedom of movement for their development.

However, there could be dire consequences if they are allowed to move freely. 88% of the scheduled caste women, 46% of the schedule tribe women and 33% of the upper caste women agree that they would be subject to taunting by village and neighbourhood unemployed youths. In total 51% of all the rural women surveyed agree that they would be subject to jeering if they are allowed to move freely.

Apart from being subjected to taunting by unemployed youth, they also would have to put up with slander and gossip by village and neighbourhood elders. 88% of the scheduled caste women, 61% of the upper caste women agree to this fact. In total 59% of all the women agree that they would be confronted with slander and gossip problem.

The more painful fact for them is that their parents also would be subjected to neighbourhood gossip and criticism by elders. 88% of the scheduled caste, 77% of the scheduled tribe and 46% of the upper caste women, in total 67% of the women agree that this problem exists.

As a consequence, parents will be subjected to rebuke by grandparents and will be advised about the misbehaviour of the girl. 88% of the scheduled caste, 77% of the scheduled tribe and 53% of the upper caste women, in total 73% of all the women agree to this view.

On a number of issues such as marriage age preference etc, there may be difference of opinions groups of respondents. Therefore, we tried to investigate, whether there is an overall difference of opinion between the scheduled caste, scheduled tribe and upper caste.

A *one way ANOVA* at a *significance level* of .05, has been used for the purpose of analysis. In addition, *Tukey's Post Hoc test* has been used to assess the difference between the two groups. For the purpose of running the statistical tests, the three groups have been arranged into three combination sets, ST and UC, SC and UC, and ST and SC.

Data has been used from table-3. It is important to state that the unanimous opinions has not been considered for the analysis, as it might not lead to any constructive statistical evidence. In addition, repetitive similar opinions have been excluded. The reason for such exclusion is, firstly, such parallel opinions are different versions of the particular sections of question, and secondly, they do not provide any further statistical evidence. For the purpose of analysis, we have only considered the affirmative response for this purpose.

The results of the tests are as follows:

| <b>GROUPS</b> | <b>F-VALUE</b> | <b>PROBABILITY</b> |
|---------------|----------------|--------------------|
| ST & UC       | 1.356          | .3504              |
| SC & UC       | 3.8421         | .0464              |
| SC & ST       | 26.301         | .000               |

The above table provides the results of the *one way ANOVA* test conducted. For the first set of combination of groups, that is Scheduled Tribe and Upper Caste, that null hypothesis is rejected at a *significance level* of .05. As the result shows a higher value than the level of



significance, it can be asserted that there is a significant difference in the opinions of the Scheduled Tribe and the Upper Caste.

In the test result of second set of combination of groups, that is Scheduled Caste and Upper Caste, the null hypothesis is accepted at a *significance* level of .05. It can be ascertained from the test results that there is no difference in opinion between the two groups, as the result shows a lower value than the level of significance. However, if the set is subjected to a more stringent level of testing, then it might yield a different result. This result stems from the fact that Scheduled Caste families usually live alongside Upper Caste families in villages and as a result they adopt the customs of Upper Caste families.

Finally, in the test result of the third set of combination of groups, that is the Scheduled Caste and the Scheduled Tribe, the null hypothesis is to be accepted at a *significance level* of .05. It can be strongly concluded that there is absolutely no difference between the opinions of the two groups, as this can be inferred from the test result with a probability .000 level of significance. Which means, that both the groups have similar opinions.

## **GENDER DISCRIMINATION**

One of the main obstacles for women's development is gender discrimination. A number of social and religious customs are very powerful deterrents to women's empowerment. For example marriage without choice, dowry and other limitations on their freedom are the most important hindrance to social and economic progress in the country. 100% of the schedule caste women, 77% of the scheduled tribe women and 93% of the upper caste women agree to this point of view. In total, 89% of all the women surveyed agree to the problems relating to the gender discrimination.

Among those who practice gender discrimination:

100% of the scheduled caste women, 46% of the scheduled tribal women and 40% of the upper caste women blame neighbours and elders, in total 68% blame neighbours and elders.

Within family 100% of the scheduled caste, 69% of the scheduled tribe and 93% of the upper caste blame it on elders, specially on females compared to males. In total, 86% blame it on elderly females.

Generically 100% of the scheduled caste, 69% of the scheduled tribe and 53% of the upper caste blame it on younger females. In total 70% of them blame younger female for gender discrimination.

For further confirmation of the fact that all the three groups actually had unanimous opinions on marriage irrespective of caste, creed and religion, a *paired sample t-test* was conducted within the three groups, that is Scheduled caste, Scheduled tribe and Upper caste, at a *significance level* of .05. The data for the purpose of the test has been taken from the table-3. The affirmative late marriage preferences and the reason for their preferences are compared within the three groups.

The test results are as follows:

| <b>GROUPS</b> | <b>Standard Error Of Mean</b>  | <b>t-Value</b> | <b>Significance 2-Tailed</b> |
|---------------|--|----------------|------------------------------|
| Sc-St         | .200   | -6.00          | .004                         |
| St-Uc         | .200   | -19.00         | .000                         |
| Sc-Uc         | The t-value could not be calculated as the <i>Standard Error Of The Differences</i> is zero. |                |                              |

The above test result clearly indicates a further confirmation to the fact that there is absolutely no difference in the opinions of the three groups on marriage.

The result of the first set of group, that is Scheduled caste and Scheduled tribe shows no difference in the opinion at a significance level of .05.

Similarly, the second set of group, that is Scheduled tribe and Upper caste showed a similar result, that there is no difference in the opinion of the two groups at a significance level of .05.

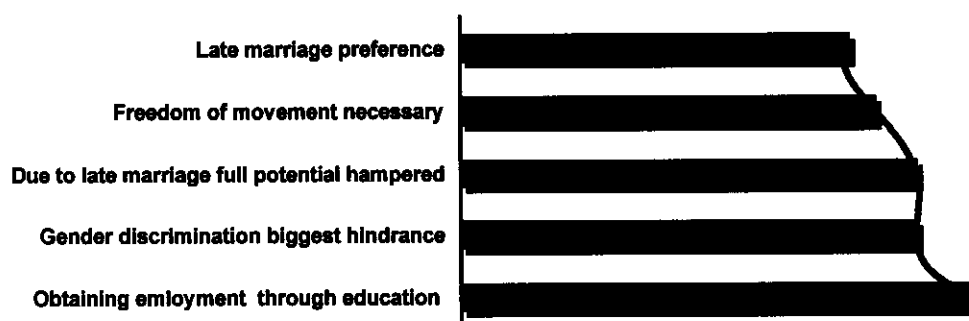
Finally, the third set of group, that is the Scheduled caste and Upper caste, the result is absolutely significant, returning a Zero Standard Error Of The Differences. Since the standard error of differences reflects how much sampling fluctuation a statistic will show, therefore it is clear from the test result that the difference is absolutely zero, that is in case of the opinions of the Scheduled caste and the Upper caste there is no difference at all.

To gauge the relative strengths of affirmative responses in Table-3, we present in Table-4 the ranking of affirmative responses in descending order:

| <b>RESPONSES</b>                             | <b>*RANKING OF AFFIRMATIVE RESPONSES IN DESCENDING ORDER</b> |
|--|--|
| Obtaining employment through education.      | 10   |
| Gender discrimination biggest hindrance      | 8.9  |
| Due to late marriage full potential hampered | 8.9  |
| Freedom of movement necessary                | 8.1  |
| Late marriage preference                     | 7.6  |

\* **Note:** For 100% points the ranking is 10, which is highest.

A graphical representation of the ranking is as follows:



As it is evident from the above table and graph that, the availability of appropriate education and removal of gender discrimination assume crucial importance in women's empowerment.

## **NON-FORMAL EDUCATION, COMMUNITY EDUCATION AND DEROGATORY CUSTOMS**

The World Bank study (1991) admits that the 'enabling' quality of education, which allows women with primary and middle school education to enter secondary and tertiary occupations more easily than illiterate women, may be offset to some extent by the lesser 'need to work' among women in middle and high socio-economic groups as well as by traditional purdah-practices common among the middle class. Importantly a larger share of literate and educated women than illiterate ones enter into occupations outside the home, classified as

'non-household' occupations in the secondary sector. Even modest levels of education decrease rural women's participation in the primary sector. The study agrees that female education in India must be enhanced through both the formal school system and non-formal schemes. Adults and school drop-outs are critical target group in addition to younger school entrants. Also it further agrees that improving the quality of primary education would go a long way to increasing girls' participation. At the same time, non-formal education must be directed at girls whose need to work deprives them of the opportunity to attend formal school and provide them the equivalent of five years of schooling. These can encourage greater participation through the provision of incentives to girls. Furthermore, the provision of basic literacy and numeracy skills to adult women will enhance economic productivity and welfare. Production oriented skill training can also enhance women's earning capacity and open up new avenues of employment.

However as our fieldwork has shown, gender discrimination is enforced not only on women and girls in U.C. families but also on women and girls in S.C. and S.T. families. Therefore, non-formal and formal education ought to be combined with community education of all village and family elders to convince them of the urgent need to discontinue the practice of 'ideology of seclusion'. World Bank's assessment of this problem of women's education in tribal India overlooks the urgent need for the removal of institutional impediments in the field of education of girls and females. Without this, no real progress can be made towards the empowerment of women.

## **CONCLUSION**

Improvement of women's economic condition is considered to be one of the most important objectives in development issues. Both the World Bank and the United Nations have taken an active interest and participation in various projects trying to improve the economic situation of women. The effort of the United Nations have been reflected in first constructing the Gender Development Index (GDI) and then the Gender Empowerment Measure (GEM). Gender Development Index is an extension of Human Development Index which takes into account the gender issues into consideration. Both the GDI and HDI to a large extent is based on Sen's work on endowment and exchange entitlement, therefore they are limited to the same extent as his theory. For example, primary gross enrolment ratio, one of the

measurements of women welfare is a part of GDI, which is based on the concept that education will lead to endowment and higher exchange entitlement.

However, social, cultural and institutional impediments which are very much country specific, have not been taken into account. For example the Panchayat Raj system in India has been lauded by World Bank as being an extension of Gender Empowerment Measure. However, the process of empowerment of women cannot make much progress due to cultural impediments and ideology of seclusion.

Nevertheless, one thing that has been firmly established is that education is the most important prerequisite for uplifting of the status of women in general and of rural and poor women in particular. Education as prescribed by Sen's theory will certainly increase the endowment set of a women, however the more important aspect of the theory lies in the exchange entitlement of that endowment. If there is no exchange entitlement for the endowment set of an individual, there will be no economic progress and the poor will remain poor.

From the two surveys conducted in a tribal area in West Bengal in India, it is evident, how strong the cultural impediments are. In spite of having a proper education, women fail to or even can't afford to get a job. Also as discussed earlier in the text, in South Asian context enrolment ratio cannot be used as the most important indicator of progress of girls' and females' education, particularly in rural areas of India.

One of the biggest cultural impediments to improving women's status is the marriage factor. In both the surveys conducted, women expressed strong preference for late marriage. They wish to have a late marriage so that they can further their career. The second survey pointed out very strongly that all of them want to get a proper job. However being female they are automatically subjected to the ideology of seclusion and it is difficult for them to follow some independent profession or start some commercial venture. On these points the opinions are unanimous irrespective of caste and creed. This point has been confirmed with the paired sample t-test conducted within the various group, which clearly showed that there is absolutely no difference in the opinions among the three groups, the Scheduled caste, the Scheduled tribe and the Upper caste, regarding their preference for late marriage.

Furthermore, Table-3, indicates that although the overall opinions of the three groups are the same, difference is noticed in the overall opinions of the Scheduled tribe and the Upper caste, due to significant difference in their socio-economic status and cultural backgrounds.

Another point which became obvious from the two surveys is that although most females prefer a late marriage, they are aware of the consequences of late marriage. Late marriage is looked down upon strongly in rural India. If the women are not married at early stage they will be subjected to various type of humiliation including taunting by youth, gossip by neighbours and criticism from elders.

Even the parents are not free from the social pressure which they are subjected to, due to late marriage of their daughter. The pressure might become so high, that to the parents the offspring seems to become more like a burden, to be rid of by a marriage. Under those circumstances marriage becomes perhaps the most important achievement in both the girl's and her parents' life.

Both the married and unmarried women are restricted from free movement in the rural hinterland. Even travelling too far to gain education is looked down upon. As a consequence, the prospect of getting a job becomes remote even with proper education. However in most of the cases the education that females obtain does not seem to be appropriate due to the ideology of seclusion. For example when a technical qualification is perhaps essential to get a job, the education best suited to social and cultural norms are provided. As a consequence, even a graduate degree becomes somehow irrelevant for obtaining a job. In some cases, a women cannot even take up a job if it is offered at a place at some distance from her home.

This study shows that in cultural impediments which includes the social and traditional factors, education does not play a major role in the improvement of female economic condition. The Gender Empowerment Measure and the Gender Development Index loses much of its significance in the rural hinterland of India. The endowment factor definitely increases due to education however there is no exchange entitlement for such endowment factors. The measurement of women's welfare by GDI and GEM, specially in the rural sector, at best can be termed as incomplete and insufficient. This paper concludes that there is the necessity for a social index, which will measure the various cultural impediments, with ideology of seclusion perhaps being given the highest weight.

## REFERENCES

- Agarwal, B. 1989 "Rural women, Poverty and Natural Resources", *Economic and Political Weekly*, 24(43).
- Anand, S. and Sen A. (1995) "Gender Inequality in Human Development: Theories and Measurement," *HDR Office Occasional Paper 19*, New York: UNDP.
- Banerjee, N.K. (1989) "Trends in Women's Employment, 1971-81: Some Macro Level Observations", *Economic and Political Weekly*, 16(25).
- Bhalla, S. (1989) "Technological Change and Women Workers, Evidence from the Expansionary Phase in Haryana Agriculture", *Economic and Political Weekly*, 24(43).
- Chambers, R. (1988) "Poverty in India: Concepts, Research and Reality", Discussion Paper 241, University of Sussex: Institute of Development Studies.
- Chen, M.(1989) "Women's Work in Indian Agriculture by Agro-Ecological Zones: Meeting Needs of Landless and Landpoor Women", *Economic and Political Weekly*, 24(43).
- Duvvury, N. (1989) "Women in Agriculture: A Review of the Indian Literature", *Economic and Political Weekly*, 24,(43)
- Government of India (1995) *Economic Survey 1994-95*, New Delhi: Government of India.
- IMF (1994) *Government Finance Statistics Year Book - 1994*, Washington D.C.: IMF.
- Jodha, N.S. (1986) "Common Property Resources and the Rural Poor", *Economic and Political Weekly*, 21(27).
- LHP://www.undp.org./gender/
- NCAER(1994).Non-Enrolment, Drop-Out And Private Expenditure Elementry Education:A companion across states and population groups. New Delhi-
- NSSO(1991) "Participation in education, NSS 42<sup>nd</sup> rounds".Sarvekshna, 14(3).
- Rao, C.H.H. (1991) "Rural Society and Agricultural Development in Course of Industrialisation, Case of India", *Economic and Political Weekly*, 24(11,12).

Roy, K.C. and Clark, C. (eds) (1994) *Technological Change and Rural Development in Poor Countries: Neglected Issues*, New Delhi: Oxford University Press.

Roy, K.C. and Tisdell, C.A. (1993a) "Poverty Amongst Females in Rural India: Gender Based Deprivation and Technological Change", *Economic Studies*, 31(4).

Roy, K.C. and Tisdell, C.A. (1993b) "Technological Change, Environment and Poor Women – Specially Tribal Women in India", *Savings and Development*, 17(4).

Roy, K.C. Tisdell, C.A. and Sen, R.K. (eds) (1992) *Economic Development and Environment: A Case Study of India*, Calcutta: Oxford University Press.

Roy, K.C., Tisdell, C.A. and Blomqvist, H.C. (eds) (1996) *Economic Development and Women in the World Community*, C.T., London: Praeger.

Roy, K.C. and Tisdell, C.A. (1996) "Women in South Asia with Particular Reference to India", in Roy, K.C., Tisdell, C.A. and Blomqvist, H.C. (eds) (1996) *Economic Development and Women in the World Community*, C.T., London: Praeger.

Sen, A.K. (1981) *Poverty and Famines: An Essay on Entitlement and Deprivation*, Oxford; Clarendon Press.

Schlutz, T.P.(1993) "Returns to women's education", in King, E.M and Hill, M.A(eds). *Women education in developing countries*. Balltimore: John Hopkins University Press.

Tilak, J.B.G(1987) *Economics of inequality in education*. New Delhi: Safe Publications.economic and Political Weekly, 22(43).

UNDP (1995) *Human Development Report*.

World Bank (1991) *Gender and Poverty in India*, Washington D.C.: World Bank.

World Bank (1996, 1995) *World Development Report*, New York: Oxford University Press.



**PREVIOUS WORKING PAPERS IN THE SERIES  
*SOCIAL ECONOMICS, POLICY AND DEVELOPMENT***

1. Poverty and Economically Deprived Women and Children: Theories, Emerging Policy Issues and Development by Clem Tisdell, September 1999.
2. Sen's Entitlement Theory and the Deprivation of Females: An Assessment With Indian Illustrations by Clem Tisdell, Kartik Roy and Anand Ghose, September 1999.
3. Gender Inequality, Development and UNDP's Social Valuation Indices: HDI, GDI and GEM with Particular Reference to India by Clem Tisdell, Kartik Roy and Anand Ghose, September 1999.
4. Asset – Poor Women in India and the Relevance of Amartya Sen's Analysis by Clem Tisdell, February 2000.