



WORKING PAPER 130

DOES LABOUR FORCE PARTICIPATION ENHANCE AUTONOMY OF POOR WOMEN? EVIDENCE FROM TAMIL NADU, INDIA

M Sivakami

ISBN 81-7791-086-8

© 2003, Copyright Reserved

The Institute for Social and Economic Change,
Bangalore

Institute for Social and Economic Change (ISEC) is engaged in interdisciplinary research in analytical and applied areas of the social sciences, encompassing diverse aspects of development. ISEC works with central, state and local governments as well as international agencies by undertaking systematic studies of resource potential, identifying factors influencing growth and examining measures for reducing poverty. The thrust areas of research include state and local economic policies, issues relating to sociological and demographic transition, environmental issues and fiscal, administrative and political decentralization and governance. It pursues fruitful contacts with other institutions and scholars devoted to social science research through collaborative research programmes, seminars, etc.

The Working Paper Series provides an opportunity for ISEC faculty, visiting fellows and PhD scholars to discuss their ideas and research work before publication and to get feedback from their peer group. Papers selected for publication in the series present empirical analyses and generally deal with wider issues of public policy at a sectoral, regional or national level. These working papers undergo review but typically do not present final research results, and constitute works in progress.

DOES LABOUR FORCE PARTICIPATION ENHANCE AUTONOMY OF POOR WOMEN? EVIDENCE FROM TAMIL NADU, INDIA¹

M Sivakami*

Abstract

This paper, based on data from select Scheduled Caste rural settlements and urban slums in Tamil Nadu, examines whether female participation in the labour force enhances the autonomy of women in poor populations. Factor analysis was carried out to identify key factors of autonomy. Regression analysis showed that in urban areas (not rural areas) work participation enhances female autonomy even after controlling for other socio-economic and demographic factors.

Introduction and Objectives

In recent years, demographic literature has increasingly recognised the importance of female autonomy as a factor in demographic processes. The International Conference on Population and Development (ICPD) held in Cairo, 1994, drew the attention of social scientists to female autonomy. Since then there has been great debate on measurement, conceptualisation, and dimensions of female autonomy and its effect on various demographic processes in developing and developed countries. As mentioned by Barroso and Jacobson (2002), women's empowerment has become a stated priority of governments, multilateral and bilateral institutions, and private foundations concerned with current demographic trends. Several researchers have identified the low status of women in India as one of the vital factors for India's population growth and various other demographic factors such as low age at marriage, high fertility, high infant mortality, etc. (Caldwell *et al.*, 1982; Dyson and Moore, 1983; Morgan and Niraula, 1995; Dharmalingam and Morgan, 1996; Das *et al.*, 2002). Various steps are being taken to enhance women's autonomy, especially in developing countries like India, through the promotion of

* M Sivakami, Assistant Professor, Population Research Centre, Institute for Social and Economic Change, Bangalore- 560 072. E-mail: siva4432@yahoo.com

I would like to express my sincere thanks to Prof. P M Kulkarni, CSRD, JNU, for his valuable suggestions and constant encouragement. I extend my thanks to Prof. Raju, ISEC, for his support in writing this paper. Also I thank Prof. Krishnan, Prof. Rayappa, Dr. Ajit Menon and Dr. Madeswaran for their useful comments on the earlier draft of this paper.

higher education and participation in the labour force. In patriarchal societies, men exercise control over women and take major decisions at the familial and household levels. However, it is widely believed that the participation of women in the labour force and its consequent economic contribution are primary determinants of women's autonomy (Schultz, 1982; Jejeebhoy, 1991; Kishore, 2000).

With participation in work and consequent earnings, women can take major decisions on their own and influence decisions on household activities. Further, with rising levels of education and participation in the labour force, women are able to enjoy greater freedom of mobility and expenditure. Apart from these benefits, working women have greater exposure to the outside world through discussion with peer groups at the work place. However, in a developing country like India where women's labour force participation is often motivated by poverty, these benefits are likely to be mediated by the social context of women's work and their work burden (Bardhan, 1985; Desai and Jain, 1994). Dixon-Muller (1993) mentioned that participation of women in the labour force may help provide alternative sources of social identity, financial independence, and exposure to and integration into power structures independent of kin networks. Sen (1990) mentioned that if women are the primary earners in a household, they are potentially in a better position to participate in household decision making and have greater negotiating room, especially with regard to the disposal of resources. A recent study conducted in Pakistan by Hakim *et al.*, (2003) also points out that women's occupational status was a significant predictor of some of the indicators of women's autonomy such as mobility and final decision making regarding child treatment, but shows little effect on the degree of autonomy. Hence, it is generally accepted that participation of women in the labour force brings greater autonomy. But does work status have a similar effect on poor women, where the work participation is forced by poverty? The purpose of this paper is twofold - first, to identify a set of key factors of female autonomy from the available information, and second, to examine whether work participation of women enhances autonomy where the work participation is forced by poverty.

Data

The data for the study are taken from a survey of poor women in Tamil Nadu, India. It must be noted that this survey was not primarily designed to examine the relationship between female work participation and autonomy. Instead, it sought to examine the effect of mother's work participation on child health. Female autonomy, however, was conceived as an important intermediate factor and hence data on various aspects of this were also collected.

It was necessary to select an area with a large proportion of both working and non-working women since the study was basically

designed to examine the effect of work participation on child health. This calls for selection of a region with a high level of female work participation. Accordingly, the state of Tamil Nadu in India was selected as it has a relatively high level of female participation in the labour force, 29.9 per cent in 1991, well above the national average of 22.3 per cent (Registrar General, India 1992). The survey covered poor localities in both rural and urban areas. It is well recognised that the nature of work could be different in both rural and urban areas. In rural areas, most women are engaged in agricultural and related activities, and the available jobs would be in the same village or in the neighbouring villages. In urban slums, working women are generally casual workers often engaged in construction activities or as domestic servants mostly outside the slum.

Within the state, Coimbatore district, which has a high level of urbanisation with a nearly equal urban (52.6 per cent) and rural (47.6 per cent) population, was selected (Registrar General, India, 1992). Since the study concentrates only on poor populations, slums in Coimbatore city and Scheduled Caste (SC)² settlements in rural areas were chosen for the study. Slums with the highest level of female work participation and villages with female work participation and female literacy close to the district average and SC population of at least 500 persons were chosen for the survey. As mentioned earlier, the data were obtained primarily to examine the relationship between mother's work participation and child health, and hence the study focused only on currently married women in the age group of 15-49 who had at least one live birth. Thus, the coverage is restricted and other women (those who are outside the reproductive ages, not currently married, and without a child) are not included; this fact must be borne in mind in interpreting the results. A total of 529 women were interviewed in the survey, 285 in the urban slums and 244 in the rural settlements. Women who were normally engaged in economic activity during the previous year were identified as working women. The survey was carried out during August 1998 to January 1999.

Conceptualising and Measuring Female Autonomy

In developing countries like India that are experiencing major social, economic and developmental changes, it is very difficult to measure female autonomy or empowerment. Female autonomy and, more recently, female empowerment are often used simultaneously (ICPD, 1994) to represent women's position in society. Female autonomy has been conceptualised in different ways by researchers. Buvinic (1976) has defined women's status as 'the ranking, in terms of prestige, power or esteem according to the position of women in comparison with, relative to, the ranking – also in terms of prestige, power, esteem-given to the position of men'. Dixon (1978) has defined status as 'the degree of women's access to (and control

over) material resources (including food, income, land, and other forms of wealth) and to social resources (including knowledge, power, and prestige) within the family, in the community, and in the society at large'. Dyson and Moore (1983) have used the term 'autonomy' instead of 'status' because it indicates 'the ability (technical, social, and psychological) to obtain information and to use it as the basis for making decisions about one's private concerns and those of one's intimates'. These definitions suggest that women's status and, more recently, women's autonomy are multidimensional phenomena or a combination of many other variables related to day-to-day activities. Education, employment, spousal age difference, family structure, etc. are some of the commonly used proxy variables (Caldwell *et al.*, 1982; Mason, 1984; Mason, 1986; and Jejeebhoy, 1995) in the absence of a single identifying indicator. Recently, there has been a shift from commonly used variables to direct measures or indicators of female autonomy especially in the demographic literature (IIPS and ORC Macro, 2000; Kishor, 2000; Sathar and Kazi, 2000; Jejeebhoy and Sathar, 2002).

In this paper, female autonomy is conceptualised in terms of *women's role in decision-making* on various day-to-day activities. The respondents were asked about the role they play in decision making on specific tasks in the family. This broadly includes aspects of household finance, savings, personal mobility, social engagements, child education, health, fertility regulation and family size. The inclusion of these dimensions of various activities allows for a better understanding of female autonomy. Here, autonomy is defined as the degree of participation in various household decisions and the ability to take decisions about the various day-to-day activities mentioned above. Information about indicators used to measure female autonomy is given in the respective sections. First, the level of participation in various household activities of working women is compared to that of non-working women. Summary measures of autonomy are obtained based on the degree of women's role in the various activities. Next, an attempt is made to identify the broad dimensions of female autonomy. This is followed by an assessment of the effect of work participation on female autonomy.

The Study Area

Coimbatore district constitutes the western portion of the state of Tamil Nadu. Coimbatore city is a major industrial city in Tamil Nadu, dominated by textile and hosiery industries, and is called the Manchester of South India. There are also many engineering units and foundries. The city has a large number of poor localities or slums (Economist Group, 1988). A majority of the people in slums belong to Scheduled Castes but there are some backward caste communities as well. The overall condition of slums is pathetic. People generally live in small single-room tenements. Though

Coimbatore is an industrial district, it is also agriculturally well developed. The sample villages are situated about 30 kilometres from Coimbatore city. The overall condition of the SC settlements in the villages is also poor. Very few in rural and urban areas have *pucca*³ bathrooms. *Kutch*a bathrooms, made up of coconut leaves and jute bags, are very common. There are absolutely no toilets, either private or common, in slums whereas in rural areas a few houses at least have toilets. Drainage is very poor in all the settlements selected in both rural and urban areas. Two of the three villages have a primary health centre (PHC) while the other village is served by the PHC in a neighbouring village. Midwives usually visit the slums regularly and Village Health Nurses (VHN) provide health care to the rural settlements.

Nature of Work of Respondents

In the urban slums, the main economic activity for women is construction. A sizeable number of women were also engaged as domestic servants. The work is outside the slums, but mostly at a nearby place in the city. In rural areas, the main economic activity for women is agriculture and related activities. The work is often seasonal and is outside the home though mostly in the same village or in a neighbouring village. In both rural and urban areas, the working hours are generally from six to seven in the morning to about two to three in the afternoon with a break for breakfast. The proportion of women working for the full day (normal working day) is higher in rural areas than in urban areas. About 80 per cent worked throughout the year; i.e. for all the 12 months; this percentage does not differ between urban and rural areas (not shown in the table). However, in a month, the urban women worked for an average of 20.5 days, and the rural women for an average of 16.5 days. Thus, though both urban and rural working women work year round, the number of days is less for rural women on average. This is because agricultural labour, the predominant occupation of rural working women, may not be available on many days. In both rural and urban areas, almost all women work away from home. The wages are Rs. 30-40 per day.

In the urban slums women, as well as their husbands, are usually engaged in construction work in the same place but not necessarily all the time. In rural areas, whereas women do jobs like sowing seeds, transplanting, weeding, and harvesting, men do the ploughing and digging. Since it is casual and seasonal work, women in rural areas stay at home especially during the off-season period. Working women, of course, also take care of their household activities such as cooking, childcare, bringing water, etc. Most of the working women in both rural and urban areas leave their children at home to be cared for by the neighbours or elder siblings. However, when a child is ill, many women forgo work to attend to the child.

The Sample

Of the 529 currently married women in the sample (as mentioned earlier, women outside the reproductive ages, not currently married, and without a child are not included in the study), 267 (141 from urban areas and 126 from rural areas) were working women and 262 (144 from urban areas and 118 from rural areas) were non-working women. A comparative view of the demographic and socio-economic characteristics of the two areas is presented in Table 1. It can be seen that non-working women are younger than working women on an average in both rural and urban areas. The mean age at marriage of non-working women as well as that of their husbands is slightly higher than that of working women and their husbands. The mean number of pregnancies, mean number of live births and mean number of living children are higher among working women. In both rural and urban areas, the level of literacy is higher among non-working women as compared with working women; overall it is quite low in rural areas as compared with urban areas. Working women have higher household incomes than non-working women do in both the areas, but the gap is wider in villages (among working women, the annual household income includes their own income also). In urban areas, a greater proportion of non-working women than working women reside in *pucca* houses; no such difference is seen in rural areas. Overall, working women are slightly older, have more children and higher incomes, but are less literate than non-working women. Working women in urban areas alone have poorer living conditions, as compared with non-working women.

Role of Women in Various Tasks and Activities

Indicators of Household Expenditure and Personal Mobility

The respondents were asked whether they had any bank account in their own name or jointly, freedom to spend this money at their own convenience, possession of property in their name, and freedom to sell or use that property. Maintaining household expenditure involves both decision making and action regarding how much to spend on what and how to control or manipulate the expenditure in the total budget. To examine these things, the role of women in looking after the household expenses was also ascertained. Information on mobility of a woman, in particular, whether she has the freedom to go alone for social engagements, was also obtained. Generally, women are involved in looking after *household expenditure*. In both urban and rural areas, nearly 80 per cent of the women said they had a role in this and over 50 per cent of the respondents were maintaining household expenditure by themselves in urban areas (Table 2). There is no difference in this between working and non-working women. In rural areas, a slightly higher proportion of working women were maintaining the household expenditure as compared with non-working women.

Table 1: Demographic and Socio-economic Characteristics of the Sample Population

Characteristics	URBAN		RURAL	
	Working	Non-working	Working	Non-working
Age of the respondent	(Percentage Distribution)			
Less than 25	9.2	23.6	13.5	56.8
25-29	29.1	38.9	33.3	30.5
30-34	31.2	13.2	20.6	5.9
35+	30.5	24.3	32.5	6.8
Total	100.0	100.0	100.0	100.0
Mean age of the respondent	32.0	29.7	31.2	25.3
Mean age of the husband	37.9	35.8	36.6	30.3
Mean age at marriage of the respondent	18.2	19.1	16.6	17.7
Mean age at marriage of the husband	24.1	25.2	22.0	22.6
Mean number of pregnancies	3.1	2.5	3.0	2.4
Mean number of live births	2.6	2.2	2.7	2.2
Mean number of living children	2.3	2.0	2.4	1.9
Percentage of respondents literate	55.3	75.0	15.9	34.7
Percentage of husbands literate	70.2	84.0	30.2	53.4
Mean annual household income	26898	24227	26898	21122
Percentage residing in <i>pucca</i> house	41.8	50.7	40.5	40.7
Percentage having separate kitchen	16.3	28.5	32.5	30.5
Number of women	141	144	126	118

A majority of women have *freedom of mobility* to go to another place (village or town) by themselves to attend to family matters such as calling on relatives and attending social functions (Table 2). There was no insistence on someone accompanying them. Thus, women in the study areas have considerable freedom of movement. This is in contrast to the restrictions on mobility of women common in some other regions of India. No differences were observed between working and non-working women in both rural and urban areas.

Very few (less than 5 per cent) women interviewed in the study had *any property in their name* or *any bank account* either jointly or separately in their name (not shown in table). However, this does not indicate lack of autonomy. The study population is poor and most do not own any property. The question of ownership of property or bank account in the woman's name is not really relevant for most.

Table 2: Women's Role in Managing Household Expenditure and Personal Mobility

Tasks	URBAN				RURAL			
	Working		Non-working		Working		Non-working	
	No.	Per cent	No.	Per cent	No.	Per cent	No.	Per cent
<i>Person who looks after the household expenditure</i>								
Only Respondent	78	55.3	80	55.6	68	54	54	45.8
Both (Husband & Wife)	29	20.6	27	18.8	33	26.2	29	24.6
Respondent & Others	5	3.5	6	4.2	5	4.0	11	9.3
Only Others	29	20.6	31	21.5	20	15.9	24	20.3
<i>Personal mobility</i>								
Yes	76	53.9	83	57.6	77	61.1	73	61.9
No	65	46.1	61	42.4	49	38.9	45	38.1
Number of women	141		144		126		118	

Note: No statistical tests on the equality of distributions for working and non-working women are shown here; the effect of work status on indicators of autonomy is examined from Table 7 onwards.



Indicators of Specific Tasks

The respondents were asked about the role they play in the initiation of specific tasks in the family and in decision making. For this purpose, a woman's role in the following activities were considered: to buy clothes, to buy consumer durables, to save or invest, to buy a property or construct a house, to invite guests, to attend social functions, to present gifts, to go to the cinema or temple, to send children to school, to utilise health facilities, to choose family size, and to regulate fertility. For each of these 12 tasks, it was ascertained whether it is normally initiated by the respondent herself, or by both the husband and the respondent, or by others but discussed with the respondent, or only by others (respondent not being involved). It was also ascertained for each of the activities whether the final decision was made *mainly by the respondent, or by others with the involvement of the respondent, or by only others (with respondent not being involved)*. For all the activities, the overall pattern in terms of role in decision making was not much different according to who initiated the activity. Hence, only the decision-making aspect is used in the analysis. Table 3 provides information on this for the specified tasks.

Table 3: Role of Women in Specific Tasks and Activities

Various tasks/activities	URBAN				RURAL			
	Working		Non-working		Working		Non-working	
	No.	Per cent	No.	Per cent	No.	Per cent	No.	Per cent
Final decision to buy clothes								
Mainly by respondent	58	41.1	57	39.6	43	34.1	37	31.4
Others but respondent involved	43	30.5	47	32.6	44	34.9	45	38.1
Only others (respondent not involved)	40	28.4	40	27.8	39	31.0	36	30.5
Number of women	141		144		126		118	
Final decision to buy consumer goods								
Mainly by respondent	62	45.9	44	31.4	51	41.1	44	37.6
Others but respondent involved	28	20.7	37	26.4	31	25.0	31	26.5
Only others (respondent not involved)	45	33.3	59	42.1	42	33.9	42	35.9
Number of women	135		140		124		117	
Final decision to save and invest								
Mainly by respondent	48	39.0	27	22.1	48	40.7	21	19.3
Others but respondent involved	34	27.6	41	33.6	28	23.7	39	35.8
Only others (respondent not involved)	41	33.3	54	44.3	42	35.6	49	45.0
Number of women	123		122		118		109	

Continued...

Various tasks/activities	URBAN				RURAL			
	Working		Non-working		Working		Non-working	
	No.	Per cent	No.	Per cent	No.	Per cent	No.	Per cent
Final decision to buy a property or construct a house								
Mainly by respondent	24	34.3	13	14.0	30	29.4	12	13.3
Others but respondent involved	27	38.6	34	36.6	31	30.4	35	38.9
Only others (respondent not involved)	19	27.1	46	49.5	41	40.2	43	47.8
Number of women	70		93		102		90	
Final decision to invite guests								
Mainly by respondent	50	35.5	43	30.1	37	29.6	35	29.9
Others but respondent involved	63	44.7	63	44.1	44	35.2	53	45.3
Only others (respondent not involved)	28	19.9	37	25.9	44	35.2	29	24.8
Number of women	141		143		125		117	
Final decision to attend social functions								
Mainly by respondent	50	35.5	36	25.2	42	33.3	31	26.5
Others but respondent involved	59	41.8	59	41.3	41	32.5	49	41.9
Only others (respondent not involved)	32	22.7	48	33.6	43	34.1	37	31.6
Number of women	141		143		126		117	

Continued...



Various tasks/activities	URBAN				RURAL			
	Working		Non-working		Working		Non-working	
	No.	Per cent	No.	Per cent	No.	Per cent	No.	Per cent
Final decision to present gift								
Mainly by respondent	53	37.6	43	29.9	47	37.3	30	25.6
Others but respondent involved	52	36.9	56	38.9	37	29.4	47	40.2
Only others (respondent not involved)	36	25.5	45	31.3	42	33.3	40	34.2
Number of women	141		144		126		117	
Final decision to go to the cinema or temple								
Mainly by respondent	73	52.1	55	38.5	46	36.5	51	43.6
Others but respondent involved	44	31.4	43	30.1	40	31.7	41	35.0
Only others (respondent not involved)	23	16.4	45	31.5	40	31.7	25	21.4
Number of women	140		143		126		117	
Final decision to send children to school								
Mainly by respondent	42	31.1	25	19.4	22	18.6	25	29.1
Others but respondent involved	48	35.6	58	45.0	42	35.6	34	39.5
Only others (respondent not involved)	45	33.3	46	35.7	54	45.8	27	31.4
Number of women	135		129		118		86	

Continued...

Various tasks/activities	URBAN				RURAL			
	Working		Non-working		Working		Non-working	
	No.	Per cent	No.	Per cent	No.	Per cent	No.	Per cent
Final decision to utilise health facilities								
Mainly by respondent	71	50.4	54	37.5	62	49.6	49	41.5
Others but respondent involved	34	24.1	45	31.3	29	23.2	31	26.3
Only others (respondent not involved)	36	25.5	45	31.3	34	27.2	38	32.2
Number of women	141		144		125		118	
Final decision to choose family size								
Mainly by respondent	75	54.0	56	39.7	64	52.5	51	46.8
Others but respondent involved	46	33.1	61	43.3	36	29.5	33	30.3
Only others (respondent not involved)	18	12.9	24	17.0	22	18.0	25	22.9
Number of women	139		141		122		109	
Final decision to regulate fertility								
Mainly by respondent	71	55.9	55	44.7	64	56.6	39	41.5
Others but respondent involved	44	34.6	50	40.7	33	29.2	36	38.3
Only others (respondent not involved)	12	9.4	18	14.6	16	14.2	19	20.2
Number of women	127		123		113		94	

- Note: 1. Some of the questions were found to be irrelevant by some respondents and the percentage distributions are obtained only for those who answered. The total number of women responding to a question are shown in the table in bold type.
2. No statistical tests on the equality of distributions for working and non-working women are shown here; the effect of work status on indicators of autonomy is examined from Table 7 onwards.

It can be seen from Table 3 that in about 40 per cent of the cases in urban areas and about 30 per cent in rural areas, the woman alone was involved in the final decision *to buy clothes*. In both rural and urban areas, about 30 per cent of the women were not involved in such decisions at all and no differences were found between working and non-working women. Women play a major role in final decisions *to buy consumer goods*; about two-thirds take such decisions themselves or with their husbands. Working women play a greater role than non-working women in urban areas. *On savings and investments*, working women have a greater say than non-working women do in both rural and urban areas. However, in about a third of the cases, women were not involved at all in such decisions; this proportion is higher among non-working women. *To buy a property or construct a house*, a higher proportion of non-working women were not involved at all in decisions and the disparity between working and non-working women in this matter is high in urban areas. It can be seen that a majority of women are involved, either solely or jointly with others in the decision *to invite guests*. However, a relatively higher proportion of working women are not involved at all in rural areas in such decisions. Regarding the final decision *to attend social functions*, a majority of women are involved, either solely or jointly with others. However, relatively higher proportions of non-working women in urban areas and one-third of rural women were not involved at all in the final decision on this matters.

It can be seen that in the case of final decision *to present gifts*, working women have greater involvement than non-working women in both rural and urban areas (Table 3). Overall, a majority of women in all areas are involved in the final decision to present gifts either solely or jointly with others. In both rural and urban areas, a greater proportion of women, solely or jointly with others, are involved in the final decision *to go to the cinema or temple* but working women in urban areas and non-working women in rural areas have a relatively greater say in such activities. The involvement of women in the final decision *to send children to school* is higher among working women in urban areas but among non-working women in rural areas. In about a third of the cases, the women are not involved in the final decision; this is more likely for rural working women. In the case of the final decision *to utilise health facilities*, women play a major role in both rural and urban areas. In about half the cases, working women alone take the final decision in both rural and urban areas. However, in both rural and urban areas, about 30 per cent among non-working women and 26 per cent among working women were not involved in the final decision. Regarding the final decision *to choose family size* a majority of women are involved either solely or jointly with others in the final decision to choose family size, more so among working women as compared with non-working women. In the case of the final decision *to regulate fertility*, a majority of the working women were involved in final decisions in both rural and urban areas.

By and large, working women play a greater role in most of the activities as compared with non-working women but marked differences between the two groups are observed only in urban areas. In fact, in rural areas, non-working women have a relatively greater say than working women in a few matters, especially social. Thus, in most activities, a large proportion of working women enjoy greater autonomy as compared with non-working women in urban areas, but working women in rural areas do not have such an advantage.

Principal Component Analysis of Female Autonomy

It must be recognised that the concept of female autonomy has not been well operationalised. There is no single widely accepted measure of female autonomy. Besides, there are a number of aspects in which autonomy is relevant. The previous section gives a picture of a woman's role in 12 individual activities. In addition, a woman's role in maintaining household expenditure discussed earlier is another activity, bringing the total to 13. In the earlier section, personal mobility was also discussed but in general terms. Since specific aspects of mobility have been included, 'personal mobility' as described earlier has not been included in further analysis. Of the 13 variables, four (to send children to school, to save or invest, to buy a property or construct a house, and, to regulate fertility) were not relevant for many women in the sample. Information on sending children to school is not relevant for women who do not have a child of school going age. Among the poor, many are not in a position to save or buy a property or construct a house and hence questions on these were found to be irrelevant by many respondents in the sample. Further, many had not decided to stop childbearing at the time of the survey. This reduces the variables to nine all of which have a strong association among themselves. Hence, it is necessary to reduce these variables to a smaller number before looking at the impact of women's labour force participation on female autonomy.

To this end, the method of principal component analysis is employed (for a description of the procedure, see Kendall, 1975). The nine variables were converted into a numeric scale as follows: 3 = decision taken mainly by respondent, 2 = decision taken by others but respondent involved, and 1 = decision by others (with no involvement of respondent). This broadly reflects the degree of women's role in decision making. A slightly different scale is used for maintenance of household expenditure. The definitions are given in Table 4.

Table 4: Variables Used to Assess the Autonomy of a Woman

Tasks/activities	Variable name	Definition
To buy clothes	CLOTH	Decision by 3 = Mainly respondent 2 = Others but respondent involved 1 = Only others (respondent not involved)
To utilise health facilities	HEALTH	3 = Mainly respondent 2 = Others but respondent involved 1 = Only others (respondent not involved)
To invite guests	GUEST	3 = Mainly respondent 2 = Others but respondent involved 1 = Only others (respondent not involved)
To attend social functions	SOCIAL	3 = Mainly respondent 2 = Others but respondent involved 1 = Only others (respondent not involved)
To present gifts	GIFT	3 = Mainly respondent 2 = Others but respondent involved 1 = Only others (respondent not involved)
To go to the cinema or temple	CINEMA	3 = Mainly respondent 2 = Others but respondent involved 1 = Only others (respondent not involved)
To buy consumer goods	GOODS	3 = Mainly respondent 2 = Others but respondent involved 1 = Only others (respondent not involved)
To choose family size	FAMILY	3 = Mainly respondent 2 = Others but respondent involved 1 = Only others (respondent not involved)
To look after the household expenses	HHEXP	4 = Only respondent 3 = Both (husband and wife) 2 = Respondent and others 1 = Only others (respondent not involved)

The study covered 529 women from urban (285) and rural (244) areas. However, some of these women did not respond to one or more of the nine items used in the analysis and thus these records could not be used. Hence, the present analysis is based on 493 women (268 urban and 225 rural) who responded to all the nine items. The correlation matrix of the nine variables is given in Table 5. It is observed that the degrees of involvement in most of the tasks used to measure female autonomy are highly significantly related. However, the decision on choosing family size does not show any significant relationship with other tasks. Decisions on attending social functions, presenting gifts, and inviting guests are highly correlated.

Table 6 gives the initial statistics of the analysis. It is observed that 36 per cent of the variance is explained by the first component itself, and about 50 per cent by the first two. The first component has high positive coefficients for variables on decisions on social matters (inviting guests, giving gifts, attending social functions, going to films) and moderate positive coefficients for decisions on economic and health matters (see Table 7). The second component is dominated by family size decisions, and the third component has moderate positive coefficients for decisions on economic matters and negative coefficients for decisions on social matters. Often, the first principal component is taken as a summary measure. In that case, it can be seen that among urban women, the mean value of the first component is significantly higher for working women than for non-working women, indicating that working women do enjoy greater autonomy (see the lower panel of Table 7). In the rural areas, however, the means are nearly identical, suggesting that work status does not change the degree of autonomy of women.

Factor Analysis of Female Autonomy

The first principal component, as noted above, gives a single measure or index of autonomy. However, there could be different dimensions of autonomy. In order to see if there are certain identifiable dimensions of autonomy, *factor analysis* has been carried out. There are various conventions for deciding the number of factors to be used. One is to restrict factors chosen to a pre-designated small number of factors so as to facilitate further analysis. Another is to use the number of components that give an eigenvalue exceeding one. According to the latter, three factors could be used here since the eigenvalue of the third component is 1.097 (Table 6). However, it was felt that three factors would be too many given that only nine variables are used. Further, the correlation matrix shows that most of the variables are highly correlated. The variable FAMILY is expected to stand out separately because the variable represents the decision about family size, which can be a good indicator of female autonomy. Therefore, it was decided to attempt the analysis with two factors and if, after rotation, meaningful factors emerge, use these.

Table 5: Correlation Matrix for Variables Used in Factor Analysis

Variables	CLOTH	HEALTH	GUEST	SOCIAL	GIFT	CINEMA	GOODS	FAMILY	HHEXP
CLOTH	1.000								
HEALTH	0.2879 (0.000)	1.000							
GUEST	0.2536 (0.000)	0.3452 (0.000)	1.000						
SOCIAL	0.2260 (0.000)	0.2791 (0.000)	0.6332 (0.000)	1.000					
GIFT	0.2618 (0.000)	0.2698 (0.000)	0.5303 (0.000)	0.6967 (0.000)	1.000				
CINEMA	0.1155 (0.008)	0.2894 (0.000)	0.4323 (0.000)	0.4286 (0.000)	0.4270 (0.000)	1.000			
GOODS	0.3233 (0.000)	0.2548 (0.000)	0.2731 (0.000)	0.2705 (0.000)	0.2822 (0.000)	0.3265 (0.000)	1.000		
FAMILY	0.0423 (0.340)	0.0431 (0.332)	0.0211 (0.635)	0.0391 (0.378)	0.0540 (0.223)	0.1047 (0.018)	0.1521 (0.001)	1.000	
HHEXP	0.2374 (0.000)	0.1810 (0.000)	0.2063 (0.000)	0.2391 (0.000)	0.2084 (0.000)	0.0784 (0.073)	0.1191 (0.007)	-0.0675 (0.128)	1.000

Note: Figures in parentheses are 'p' values. Coefficients significant at at least the 5% level are shown in bold figures.

Table 6: Principal Components Analysis of Nine Variables to Assess Female Autonomy: Initial Statistics

Component	Eigenvalue	Per cent of variation explained	Cumulative percentage
1	3.2495	36.1	36.1
2	1.1294	12.5	48.7
3	1.0973	12.2	60.8
4	0.8226	9.1	70.0
5	0.7432	8.3	78.2
6	0.6922	7.7	85.9
7	0.5277	5.9	91.8
8	0.4618	5.1	96.9
9	0.2764	3.1	100.0

Table 7: Principal Components Analysis of Nine Variables to Assess Female Autonomy

Variables	Principal component values			Communality
	First component	Second component	Third component	
CLOTH	0.48165	-0.18953	0.62149	0.65416
HEALTH	0.55009	-0.05084	0.29481	0.39210
GUEST	0.77394	-0.05110	-0.24008	0.65923
SOCIAL	0.80541	-0.05250	-0.33474	0.76349
GIFT	0.78102	-0.01504	-0.27783	0.68742
CINEMA	0.64279	0.29497	-0.23042	0.55328
GOODS	0.54104	0.28062	0.41728	0.54560
FAMILY	0.11497	0.76227	0.27403	0.66937
HHEXP	0.37164	-0.58183	0.27372	0.55156
MEAN				
Urban working (N = 132)	0.2136	0.1381	-0.0194	
Urban non-working (N = 136)	-0.1053	-0.1378	0.0054	
	(t = 2.67) (p = 0.008)	(t = 2.34) (p = 0.020)	(t = -0.20) (p = 0.842)	

Variables	Principal component values			Communi- nality
	First component	Second component	Third component	
Rural working (N = 118)	-0.0342	-0.0625	0.1113	
Rural non- working (N = 107)	-0.0250	0.0456	-0.0192	
	(t = -0.07) (p = 0.946)	(t = -0.78) (p = 0.434)	(t = 0.98) (p = 0.327)	

Note: For definition of variables, see Table 4.

Figures in parentheses are t- values (test statistics for the equality of means for working and non-working women) and corresponding 'p'- values.

The number of women is smaller than in Table 1 because for some women the values of Female Autonomy principal components could not be computed as on some items there was a non-response.

The Varimax rotation, which minimises the number of variables that have higher loadings on a factor, is used. Results are given in Table 8. It is seen that the variables CLOTH, HEALTH, GUEST, SOCIAL, GIFT, CINEMA, and GOODS have got high loadings in factor 1. These variables broadly represent social, economic, and mobility decisions of a woman. The second factor is dominated by the variable FAMILY. This variable represents autonomy of a woman on family size decisions. Hence, the social, economic, and mobility decisions (SEM) factor, and the family size decisions (FSD) factor are identified as the two meaningful factors from the nine variables. The first factor could also be perceived as General Factor, and the second factor as a special factor on Family Size decisions.

It must be noted here that factors are, in principle, different from principal components. Principal components are constructed from the available variables and can be used as composite indexes. But often it becomes difficult to name these. On the other hand, factors are underlying dimensions of the concept that a set of variables addresses. If factors can be labelled on the basis of loadings, these would be more meaningful in interpretation. For this purpose, *factor scores* were computed for each woman. Strictly speaking, these are *predicted factor scores*, since factors as such are not measurable (see Kendall, 1975, for discussion) and were computed using the *regression* option. It may be noted that the two factors obtained after rotation do not differ much from the first two principal components (see Tables 7 and 8). The factor transformation matrix shows that the first principal component is very highly correlated with rotated Factor 1 ($r = 0.998$) and the second principal component with rotated Factor 2. Therefore, use of the two factor scores is practically not different from the use of the first two principal components in this

case. From the rotated factors, it is possible to label two factors clearly and meaningfully as (1). Social, Economic and Mobility Decisions (SEM) factor, and (2). Family Size Decisions (FSD) factor.

Table 8: Factor Analysis of Nine Variables to Assess Female Autonomy: Two Factors After Varimax Rotation

Variables	Rotated factor loadings		Communality
	Factor 1	Factor 2	
CLOTH	0.46731	-0.22256	0.26791
HEALTH	0.54522	-0.08896	0.30518
GUEST	0.76851	-0.10479	0.60159
SOCIAL	0.79981	-0.10837	0.65144
GIFT	0.77809	-0.06931	0.61023
CINEMA	0.66174	0.24957	0.50019
GOODS	0.55924	0.24232	0.37147
FAMILY	0.16769	0.75243	0.59427
HHEXP	0.33029	-0.60626	0.47664
MEAN			
Urban working (N = 132)	0.2227	0.1229	
Urban non-working (N = 136)	-0.1146	-0.1302	
	(t = 2.83) (p = 0.005)	(t = 2.14) (p = 0.033)	
Rural working (N = 118)	-0.0384	-0.0600	
Rural non-working (N = 107)	-0.0217	0.0472	
	(t = -0.12) (p = 0.902)	(t = -0.78) (p = 0.438)	

Note: For definition of variables, see Table 4.

Figures in parentheses are t- values (test statistics for the equality of means for working and non-working women) and corresponding 'p'- values.

The number of women is smaller than in Table 1 because for some women the values of Female Autonomy factor scores could not be computed as on some items there was non-response.

Table 8 (lower panel) gives the means of factor scores for working and non-working women in both urban and rural areas. It can now be seen whether work participation enhances female autonomy. In an earlier

section, it was noted that working women have greater say in certain tasks or decisions as compared with non-working women. But at that stage, statistical analysis was not discussed. Now that the large number of items used to assess female autonomy have been reduced to two meaningful factors, it is possible to see if the degree of autonomy differs by work status of women. The difference between working and non-working women is tested using the test for equality of mean scores for each pair of comparison. The test statistics and corresponding p-values are given in Table 8 (lower panel). In urban areas, working women have significantly greater scores in social, economic and mobility decisions (SEM) factors and family size decisions (FSD) factors as compared with non-working women. But in rural areas, not much difference is found between mean factor scores of working and non-working women. Thus, working women in urban areas enjoy greater autonomy as compared with non-working women. This is true for social, economic, and mobility decisions as well as family size decisions. On the other hand, work participation does not seem to endow rural women with greater autonomy.

Regression Analysis of Factor Scores

Data on specific tasks used to measure female autonomy (broadly woman's role in decision making) reveal that a large proportion of working women enjoy greater autonomy in most activities as compared with non-working women in urban areas, but working women in rural areas do not have such an advantage. Mean factor scores also give a clear picture that working women have a greater advantage as compared with non-working women in urban areas. The observed differences between working and non-working women are gross effects. In most cases, the mean differences, that is without any control for background variables, were examined. Further, not many studies have examined the effect of female work participation on autonomy controlling for other variables using empirical data especially when female work participation is forced by poverty.

Regression analysis is adopted to examine the net effect of work status of women on female autonomy controlling for other factors. The dependent variable is the factor score of each factor. In the following analysis, predicted factor score of autonomy is taken as the dependent variable. In addition to work status, the other background variables, which may possibly influence female autonomy, are education of the woman (dichotomous: Illiterate = 0, Literate = 1), age of the woman (in completed years), annual income of the household (log), spousal age difference (in completed years), family structure (dichotomous: Nuclear = 0, Non-nuclear = 1), number of living sons (in actual numbers), number of living daughters (in actual numbers), and presence of mother or mother-in-law (dichotomous: Not present = 0, Present = 1).

The general model adopted is

$$Y = \beta_0 + \sum \beta_i X_i + e,$$

where

Y = Predicted factor score of autonomy variable (dependent variable)

β_0 = Constant term

b_i = Regression coefficients

X_i = Explanatory variables

e = Error term.

The functional relationship is assumed to be linear so that the model is reduced to a multiple regression model. Currently married woman in the age group of 15-49 having at least one live birth is the unit of analysis. As mentioned earlier, the sample in the study is restricted to currently married women, and this should be kept in mind while interpreting the results.

Results of Regression Analysis

Table 9 gives the results of the regression analysis for each of the two factors of autonomy of women. The left panel (two columns) in the table gives the results for the social, economic, and mobility decisions (SEM) factor (factor 1 perceived as General Factor). Working women in urban areas have a significantly greater say as compared with non-working women with regard to SEM. But in rural areas, work status does not seem to influence SEM. In urban areas, education of the woman, age gap between spouse, and age of the woman showed a positive effect on SEM. Household income showed a negative effect on SEM in rural areas. Probably, among the poor, women from slightly better off families may not enjoy freedom in social matters especially in mobility. Presence of mother or mother-in-law showed a significantly negative effect on SEM in rural areas.

Table 9: Regression Analysis for Factor Scores of Female Autonomy

Explanatory variables	Dependent variable			
	Factor 1 score SEM (Social, Economic and Mobility Decisions Factor)		Factor 2 score FSD (Family Size Decisions Factor)	
	URBAN	RURAL	URBAN	RURAL
	Regression Coefficients			
Work status of the respondent (Dichot.: Non-Working = 0, Working = 1)	0.348 (0.006)	-0.017 (0.917)	0.247 (0.051)	-0.071 (0.666)
Education of the respondent (Dichot.: Illiterate = 0, Literate = 1)	0.269 (0.042)	-0.005 (0.977)	0.044 (0.737)	-0.160 (0.348)
Age of the respondent (in completed years)	0.021 (0.042)	0.016 (0.286)	0.015 (0.194)	-0.014 (0.352)
Annual household income (log)	0.007 (0.958)	-0.409 (0.025)	-0.044 (0.732)	0.322 (0.085)
Spousal age difference (in completed years)	0.006 (0.750)	0.053 (0.020)	0.007 (0.718)	0.015 (0.520)
Total number of living daughters (in actual numbers)	0.036 (0.665)	-0.047 (0.582)	0.011 (0.895)	-0.180 (0.041)
Total number of living sons (in actual numbers)	0.032 (0.717)	-0.054 (0.626)	0.248 (0.781)	-0.072 (0.531)
Type of family (Dichot: Nuclear = 0, Non-Nuclear = 1)	0.177 (0.546)	0.308 (0.168)	0.559 (0.057)	0.008 (0.972)
Presence of mother or mother-in-law (Dichot: Not present = 0, Present = 1)	0.067 (0.746)	-0.414 (0.040)	-0.227 (0.269)	0.033 (0.873)
Constant	-1.153	2.9205	-0.6012	-2.9015
R ²	0.063	0.0251	0.0236	0.0351
Number of women	268	225	268	225

Note: Figures in the parentheses are 'p' values.
Coefficients significant at at least 5% level are shown in bold type.
The number of women is smaller than in Table 2 because for some women the values of Female Autonomy factor scores could not be computed as on some items there was non-response.

The right panel (two columns) of Table 9 gives the results for the family size decisions (FSD) factor (factor 2). It is observed that working women have significantly greater autonomy as compared with non-working women on the family size decisions factor in urban areas. Once again, in rural areas, work status does not provide greater autonomy even on family size matters. In both rural and urban areas, education of the woman does not show any significant effect on the family size decisions factor. Age of the woman showed moderately negative effect only in rural areas. The total number of living daughters showed negative effect on FSD in rural areas. Thus, participation in the labour force seems to enhance the autonomy of poor urban women; however, this is not the case in rural areas.

Limitation of the Study

Certain limitations of the present study should be noted here. First, as mentioned earlier, since the study is restricted to currently married women in the age group of 15-49 who had at least one live birth, it did not take into account all women. Second, the study is restricted to only poor populations. We should also see whether surveys of women from middle and upper classes yield similar results. Therefore, the results are applicable only to the extent that the localities represent the population being studied. That is, the results could be considered valid for such populations. The sample size and coverage are small and thus it is difficult to make any policy suggestions. We must see whether a large sample size yields similar results. From the regression analysis, we see that the R^2 value is very small. Hence, the results have to be interpreted in relative terms. Furthermore, the small R^2 suggests that the relationship is not linear, and hence non-linear forms of the relationship have to be examined.

Summary and Conclusion

The purpose of this paper was to explore whether female participation in the labour force enhances autonomy of women even in situations where labour force participation is forced by poverty. Information on women's role in various day-to-day activities were obtained from poor women in Tamil Nadu, India. Before examining the effect of work participation on female autonomy, an attempt was made to measure female autonomy because in the demographic literature, there has been a shift to use direct indicators rather than proxy variables. But there are practical and conceptual problems using direct indicators of female autonomy because of its multidimensional nature. Moreover, it is also very difficult to capture the influence of, and to understand female autonomy through a single measure. First, the available information was subjected to principal component analysis. This indicated that working women have significantly greater autonomy than non-working women do in urban areas but not in

rural areas. However, as it is difficult to identify the dimension of female autonomy using principal component analysis, factor analysis was used. Findings clearly suggest two distinct dimensions of female autonomy. Social, economic and mobility tasks are one dimension and can be called a general dimension. The second dimension is a special dimension, namely, decision on choosing family size. The conclusion derived from the analysis is that though it is very difficult to capture all the dimensions of female autonomy, it is possible to get clear dimensions using empirical data on direct indicators of female autonomy.

Results of the regression analysis showed that in urban areas, working women have a greater say than non-working women in social, economic, and mobility matters, and in choosing family size. The positive effect of work status on autonomy of poor women is statistically significant and persists only in urban areas even after controlling for other socio-economic and demographic variables. Thus, participation in the labour force seems to enhance the autonomy of poor urban women but this is not the case in rural areas. Probably the nature of work in rural and urban areas brings this differential effect. Working women in rural areas were mostly engaged in traditional activities and in the same village - that might not have added greater autonomy as compared with non-working women. On the other hand, working women in urban slums were mostly engaged in work in other localities (outside the slum), which could result in greater autonomy. This result is in agreement with the study conducted in two South Indian villages that women's autonomy/independence was much greater in the village where women are engaged in beedi rolling as compared with the village where most women were engaged in agricultural and familial activities (Dharmalingam and Morgan, 1996). The structure of beedi rolling involves more exposure and contact with outside villages and co-workers and thus enhances women's autonomy.

Further, there is a greater possibility that the 'liberalised' outlook of upper class women percolates to poor working women because a relatively high proportion of urban poor working women were engaged in domestic services in upper class households. Future research on these lines, using empirical data could be able to provide further answers. Much more research is needed to see whether autonomy in one dimension reflects autonomy in another dimension. It is also necessary to see whether the ability to control women by men in patriarchal societies differs between urban and rural settings. To sum up, the study clearly shows that labour force participation enhances the autonomy of poor women at least in urban areas. Policies should therefore be put in place to promote greater participation of rural women in non-traditional job activities.

Notes

1. An earlier version of this paper was presented at the XXV Annual Conference of the Indian Association for the Study of Population (IASP) at the International Institute for Population Sciences (IIPS), Mumbai, during February 11-13, 2002.
2. Castes that were traditionally oppressed and were treated as untouchable in the past are collectively labeled as Scheduled Castes, most are generally very poor, owning little land and traditionally engaged in low paid occupations.
3. A *pucca* house is one that is made with high quality materials throughout, including the roof, walls, and floor.

References

- Bardhan, Kalpana. 1985. 'Women's Work, Welfare and Status: Forces of Tradition and Change in India', *Economic and Political Weekly*, 20(51): 2261-2267.
- Barroso, C and J. L. Jacobson. 2000. 'Population Policy and Women's Empowerment: Challenges and Opportunities', in Presser, H. B and Gita Sen (eds.), *Women's Empowerment and Demographic Process: Moving Beyond Cairo*. New York: Oxford University Press.
- Buvinic, Mayra. 1976. *Women and World Development: An Annotated Bibliography*, Washington D.C: American Association for the Advancement of Science and Overseas Development Council.
- Caldwell, John C., P.H. Reddy, and Pat Caldwell. 1982. 'The Causes of Demographic Change in Rural South India: A Micro Approach', *Population and Development Review*, 9(1): 35-60.
- Das, N. P., M. M. Gandotra, D. Pandey, and U. Shah. 2002. *Status of Women and Reproductive Behaviour*. New Delhi: Hindustan Publishing Corporation.
- Desai, Sonalde and Jain, Devakai. 1994. 'Maternal Employment and Changes in Family Dynamics: The Social Context of Women's Work in Rural South India', *Population and Development Review*, 20(1): 115-136.
- Dharmalingam, A and P. Morgan. 1996. 'Women's Work, Autonomy and Birth Control: Evidences from Two South Indian Villages', *Population Studies*, 50(2): 187-201.
- Dixon - Mueller, R. 1993. *Population Policy and Women's Rights: Transforming Reproductive Choice*. Westport: Praeger.
- Dixon, Ruth B. 1978. *Rural Women at Work: Strategies for Development in South Asia*. Baltimore: Johns Hopkins University Press.
- Dyson, T and M. Moore. 1983. 'On Kinship Structure, Female Autonomy, and Demographic Behaviour in India', *Population and Development Review*, 9(1): 35-60.

Economist Group. 1988. *Survey of Slums in Coimbatore Urban Agglomeration. Profile of Slums in Zone I Coimbatore City*, Vol. I. Prepared for Project Management Group Tamil Nadu Urban Development Project, Madras: Government of India.

Hakim, A., S. Salway and Z. Mumtaz. 2003. 'Women's Autonomy and Uptake of Contraception in Pakistan', *Asia - Pacific Population Journal*, 18(1): 63-82.

International Institute for Population Sciences (IIPS) and ORC Macro. 2000. *National Family Health Survey (NFHS-2), 1998-99: India*. Mumbai: IIPS.

Jeejeeboy, Shireen J. 1991. 'Women's Status and Fertility: Successive Cross-Sectional Evidence from Tamil Nadu, India, 1970-80', *Studies in Family Planning*, 22(4): 217-230.

Jejeeboy, Shireen J. 1995. *Women's Education, Autonomy, and Reproductive Behaviour: Experience from Developing Countries*. Oxford: Clarendon Press.

Jejeebhoy, Shireen J and Zeba A. Sathar. 2001. 'Women's Autonomy in India and Pakistan: The Influence of Religion and Region', *Population and Development Review*, 27(4): 687-712.

Kendall, M. 1975. *Multivariate Analysis*. London: Charles Griffin & Company LTD.

Kishor, Sunitha. 2000. 'Empowerment of Women In Egypt and Links to the Survival and Health of Their Infants', in Presser, H.B and Gita Sen (eds.), *Women's Empowerment and Demographic Processes: Moving Beyond Cairo*. New York: Oxford University Press.

Mason, Karen Oppenheim. 1984. *The Status of Women: A Review of Its Relationships to Fertility and Mortality*. New York: The Rockefeller Foundation.

Mason, Karen Oppenheim. (1986). 'The Status of Women: Conceptual and Methodological Issues in Demographic Studies', *Sociological Forum*, 1(1): 284-300.

Morgan, P., and B. Niraula. 1995. 'Gender Inequality and Fertility in Two Nepali Villages', *Population and Development Review*, 21(3): 541-561.

Registrar General of India. 1992. *Final Population Totals: Brief Analysis of Primary Census Abstract*. Series No. 1. New Delhi: Government of India.

Sathar, Zeba Ayesha and Shahnaz Kazi. 2000. 'Women's Autonomy in the Context of Rural Pakistan', *Pakistan Development Review*, 39(2): 89-110.

Schultz, P. T. 1982. 'Women's Work and Their Status: Rural Indian Evidence of Labour Market and Environment Effects on Sex Differences in Childhood Mortality', in Anker, R., M. Buvinic, and H. Y. Youssef (eds.), *Women's Roles and Population Trends in the Third World*. London: International Labour Organisation.

Sen, Amartya. 1990. 'Gender and Co-operative Conflicts', in Irene Tinker (ed.), *Persistent Inequalities: Women and World Development*. New York: Oxford University Press.

United Nations. 1995. *Programme of Action of the International Conference on Population and Development, 1994*. New York: United Nations.

Recent Working Papers

91. **VEERASHEKHARAPPA**
Community Participation in Rural
Drinking Water Supply and Sanitation:
A Case Study of Karnataka
92. **M JOHNSON SAMUEL**
Communication and Linguistic Situation
in Karnataka: Demographic Perspectives
93. **K V RAJU AND H K AMAR NATH**
Irrigation Subsidies in Karnataka:
A Growing Constraint For Reforms
94. **ANAND INBANATHAN**
Elite Perceptions of Poverty:
The Case of Karnataka
95. **AMALENDU JYOTISHI**
Institutional Pluralism:
Case of Swiddeners in Orissa
96. **ANAND INBANATHAN**
Representation and Accountability
in Local Government:
The Panchayats of Karnataka
97. **M GOVINDA RAO**
Challenges of Fiscal Decentralization
in Developing and Transitional
Economies — An Asian Perspective
98. **M GOVINDA RAO**
Fiscal Decentralization
in Indian Federalism
99. **PURNA CHANDRA PARIDA,
B KAMAIAH AND
MAATHAI K MATHIYAZHAGAN**
Productivity Differentials and
the Real Exchange Rate:
Empirical Evidence from India
100. **PURNA CHANDRA PARIDA,
MAATHAI K MATHIYAZHAGAN
AND G NANCHARIAH**
Purchasing Power Parity and its
Validity in the South Asian Countries
101. **MADHUSHREE SEKHER**
Tackling Society's 'Detritus':
Stakeholder Partnerships and
Urban Service Delivery in India
102. **V VIJAYALAKSHMI**
Gender Accountability and Political
Representation in Local Government
103. **M DEVENDRA BABU**
Working of Gram Sabhas in Andhra
Pradesh: Problems and Prospects
104. **PURNA CHANDRA PARIDA,
HRUSHIKESH MALLICK AND
MAATHAI K MATHIYAZHAGAN**
Nexus between Fiscal Deficits,
Money Supply and Price Level
in India: A VAR Approach
105. **M D USHA DEVI**
Participatory Institutional Structures
in Decentralized Management of
Elementary Education in Karnataka
106. **V VIJAYALAKSHMI AND
B K CHANDRASHEKAR**
Authority, Powerlessness and
Dependence: Women and
Political Participation
107. **D V GOPALAPPA AND
R S DESHPANDE**
Education, Agriculture and Rural
Development - A Study of Two
Villages in Southern India.
108. **MD. NAZRUL ISLAM AND
AMITAYUSH VYAS**
Decentralised Governance:
A Review of the Idea and Issues
109. **AMALENDU JYOTISHI AND
R S DESHPANDE**
Land Transaction in Tribal
Economies: A Study from the
Scheduled Areas of Orissa
110. **R S DESHPANDE AND K V RAJU**
Monitoring Poverty and Human
Development Indicators: A Framework
111. **D RAJASEKHAR**
Action Research for Poverty Alleviation

- 112. ANAND INBANATHAN AND D V GOPALAPPA**
Fixers, Patronage, 'Fixing', and Local Governance in Karnataka
- 113. M GOVINDA RAO**
State Finances in India: A Critical Review
- 114. D RAJASEKHAR AND R R BIRADAR**
People, Government and the NGOs
- 115. DUKHABANDHU SAHOO AND MAATHAI K MATHIYAZHAGAN**
Economic Growth in India: Does Foreign Direct Investment Inflow Matter?
- 116. GAGAN BIHARI SAHU AND D RAJASEKHAR**
Credit Flow to Indian Agriculture: Trends and Contributing Factors
- 117. SATYAPRIYA ROUT**
Joint Forest Management in Orissa: Challenges and Opportunities
- 118. DEEPIKA M G AND R S DESHPANDE**
Trade Policy and Determinants of Trade in Agriculture
- 119. SITAKANTA SETHY**
Rural Poor's Participation in Decentralised Multilevel Planning and Development
- 120. G S SASTRY AND R JAGANNATHA RAO**
Emerging Development Issues in a Resource Region
- 121. MEENAKSHI RAJEEV**
Collusion in Corrupt System: A Game Theoretic Approach
- 122. L VENKATACHALAM**
Theories of Failure, Failure of Theories and Non-Market Valuation: A Survey
- 123. L VENKATACHALAM**
Factors Influencing Household Willingness to Pay (WTP) for Water: A Case Study
- 124. K GAYITHRI**
Who Benefits from Industrial Incentives? A Study of Capital Investment Subsidy in Karnataka
- 125. V VIJAYALAKSHMI**
Accountability and Governance: Local Government in Kerala and Karnataka
- 126. SHASHI KOLAVALLI AND K V RAJU**
Protecting Drinking Water Sources: A Sub-Basin View
- 127. K GAYITHRI**
Reducing Fiscal Deficit: Canadian Experiment and Lessons for India
- 128. V VIJAYALAKSHMI**
Scheduled Tribes and Gender: Development Perceptions from Karnataka
- 129. MEENAKSHI RAJEEV**
A Search for a Theory of Entrepreneurship: A Case Study of the Foundry Industry in Howrah and Coimbatore

ISBN 81-7791-086-8

Price: Rs.30-00



INSTITUTE FOR SOCIAL AND ECONOMIC CHANGE

Prof. V. K. R. V. Rao Road, Nagarbhavi, Bangalore - 560 072, India
 Phone : 0091-80 - 3215468, 3215592 ; Fax: 0091-80 - 3217008
 Grams: ECC, Bangalore - 560 040
 E-mail:kvraju@isec.ac.in ; Website: www.isec.ac.in