Working Paper 229

Fiscal Empowerment of Panchayats in India: Real or Rhetoric?

M Devendra Babu

## ISBN 81-7791-185-6

© 2009, 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.

### FISCAL EMPOWERMENT OF PANCHAYATS IN INDIA: REAL OR RHETORIC?

#### M Devendra Babu\*

#### Abstract

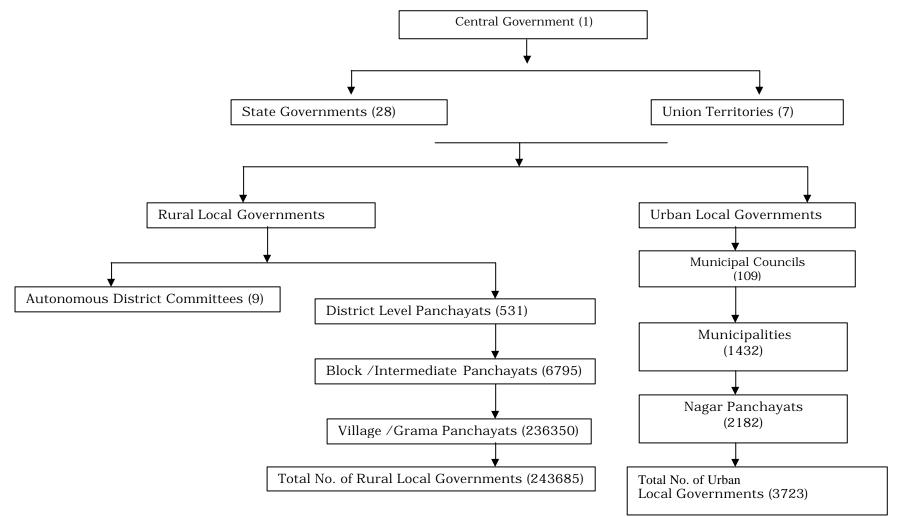
The focus of this paper is to review the financial position of panchayats in India. The analysis is based on the secondary sources of information. It reveals that the panchayats have very little fiscal autonomy. The locally raised revenues are very negligible. The funds flow from higher level governments are very low and lack any devolution design or principles. The transfers are made at the convenience and mercy of such governments.

# Introduction

India is a federal country with multi-level governance structure - the Central government at the national level, state governments and Union Territories at the sub-national (regional) level and local bodies (rural and urban) below the state level. The rural local bodies, popularly known as panchayats, have been in existence since ancient times in different forms but failed to have a firm foothold for various reasons mainly because of lack of Constitutional mandate and non-devolution of functions and resources. Keeping in view the historical blunders committed in the earlier experiments and the need for decentralised governance system in the globalised era, the Central Government in 1992 introduced the 73<sup>rd</sup> and 74<sup>th</sup> Amendments to the Constitution. The former Amendment relates to rural local governments i.e. panchayat raj institutions (PRIs) and the latter to urban local bodies (ULBs). Many provisions were incorporated under the 73<sup>rd</sup> Amendment Act with the intention of making panchayats self-governing institutions. The important provisions of the 73<sup>rd</sup> Amendment Act are: compulsory elections to PRIs once in five years, reservation of seats and executive positions for Scheduled Castes/Scheduled Tribes (SCs/STs), backward classes (optional) and women, the constitution of Finance Commission and District Planning Committees. These have made the panchayats one of the permanent political structures in India. The political structure and the number of Governments in India have been shown in Chart I. Apart from the Central Government, there are 28 states and seven Union Territories at the sub-national level, 3723 ULBs, nine Autonomous District Committees and 243676 Panchayats at the sub-state level. The Panchayats again have a three-tier structure below the state, namely, Zilla/District Panchayat at the district level, intermediate/middle level Panchayat at the Taluk/block level and Village/Grama Panchayat at the village level. This hierarchical kind of structure doesn't exist at the ULBs level.

<sup>\*</sup> Dr M Devendra Babu, Associate Professor, Centre for Decentralisation and Development, Institute for Social and Economic Change, Nagarabhavi, Bangalore – 560072. E-mail: <u>devendra@isec.ac.in</u>; devendrababu@yahoo.com

Chart 1: Political Structure and Number of Governments in India



In a federal system functions are divided across different levels of government i.e. Central/national, states/provinces and local governments. The economic rationale for decentralisation is based upon the limited geographic extent of the benefits of public goods and the relatively high costs of decision making if every thing is centralised. The Tiebout - Musgrave layer cake model of the public sector maintains that stabilisation and distribution functions of the public sector should be discharged by the Central Government and that state and local governments should engage in allocation activities (Tiebout, 1956; Musgrave, 1959). A fair degree of financial autonomy (in the true spirit of decentralisation of power) is a sine qua non for local governments to function more effectively as selfgoverning institutions; by financial autonomy we mean that they should have their own taxation and borrowing powers as well as a share in the state's taxes and duties and grants-in-aid from higher levels of government. The local governments should not only have the power to raise revenues but the own source of revenues should constitute a very significant share in the total revenues (Bahl, 1999). Further, the opinion is that the extent to which the local governments are self-financing indicates their fiscal autonomy, because outside financing may come with conditions that limit local discretion in the use of funds (World Bank, 1988: 155). Further, grants should not be too large a share of local expenditure because, when revenues get tight, higher level governments tend to cut off transfers to local governments. This discourages local governments from raising their own revenues. Local grants also should be flexible, transparent and predictable. In this regard Richard M Bird and Michael Smart (2002: 899-912) are of the view that "if services are to be efficiently provided, transfers must be designed so that those receiving them have a clear mandate, adequate resources, sufficient flexibility to make decisions and are accountable for results". The revenues available from own sources and those devolved should match the functions and responsibilities entrusted. In the absence of these, the local governments would become mere spending agencies, always dependent upon the higher level governments for the transfer of grants. Thus, the responsibility of making local governments fiscally autonomous and stronger lies with the higher level governments. The Constitution or by convention of a country, in general, specifies the tax sources, borrowing powers etc. of different levels of government. Further, it also specifies the model/agency to deal with the determination of revenues of different levels of the government. Shah (2007) has classified this model/agency into four categories. These are: 1. Central/national government agency model; 2. national legislature model; 3. intergovernmental forum model; and 4. independent agency. As per this classification, India comes under the fourth model.

In India, Article 280 of the Constitution empowers the President to constitute a Finance Commission (FC) at the central level once in five years. The FC is to make recommendations on the distribution between the Union and the states of the net proceeds of taxes, allocation between the states, the principles which should govern the grants-in-aid of the revenues of the states out of the Consolidated Fund of India etc. Similarly, Article 243(I) of 73<sup>rd</sup> Amendment Act provides for constitution of a FC by the states once in five years to look into the resources of both state and local governments. Now, more than 16 years since creating third strata governments in India, the question that arises is -how far are these governments empowered financially?

# **Objectives and Design of the Study**

Keeping in view the above background, an attempt has been made in this paper to analyse the fiscal position of PRIs in India. The specific objectives of the study are:

- a. to bring out the Legislative provisions relating to finances of PRIs;
- b. to analyse the structure, growth and composition of revenues;
- c. to examine the role and impact of State and Central Finance Commissions on the panchayat finances; and
- d. to suggest policy measures to strengthen the finances of PRIs.

The study has focused only on the revenue part and not on the expenditure side of the resources. Further, the study confines itself only to post 73<sup>rd</sup> Amendment period. The analysis made in this paper is based on quantitative data, which again is based on secondary sources. Though, this is a macro-level study, comparative analysis across the major states has been made at relevant places. As the comparable data (state-wise) source is available till 2002-03 the analysis is restricted to that time period. The main data sources for the study are: Central Finance Commission Reports, State Finance Commission Reports, Reserve Bank of India publications and Central Government Finance Department Reports, among others.

## Legislative Provisions

The Central and the state governments have provided for statutory fiscal powers and transfers considering the importance of adequate resources for the effective functioning of PRIs. The provisions relating to these have been given below.

#### **Central Level Provisions**

At the Central level, Articles 243(H) and 243(I) of the 73<sup>rd</sup> Constitutional Amendment Act (CAA) specifies broad directions on the type and method of bestowing fiscal powers on the PRIs. Article 243(H) states that the legislature of a state may, by law:

- authorise a panchayat to levy, collect and appropriate such taxes, duties, tolls and fees in accordance with such procedure and subject to such limits;
- assign to a panchayat such taxes, duties, tolls and fees levied and collected by the state government for such purposes and subject to such conditions and limits;
- provide for making such grants-in-aid to the panchayats from the Consolidated Fund of the state; and
- provide for the constitution of such funds for crediting all moneys received respectively, by or on behalf of the panchayats, and also, for the withdrawal of such moneys there from, as may be specified in the law.

Article 243(I) provides for the appointment of a 'Finance Commission' by the states once in five years. The broad responsibilities of the State Finance Commission (SFC) are to:

- distribute the state's resources between the state and the local bodies;
- assign any of the state's taxes, duties and fees to these bodies; and
- recommend grants-in-aid for the purpose of providing services.

Besides, Articles 280(bb) and 280(c) of the Constitution place additional responsibility on the Central Finance Commission (CFC) to look into the resources of the local bodies. The former Article relates to PRIs and the latter to ULBs. As per Article 280(bb), the CFC has to recommend measures needed to augment the Consolidated Fund of a state to supplement the resources of the panchayats in the state on the basis of the recommendations made by the Finance Commission of the state (Government of India, no date).

#### **State Level Provisions**

With regard to financial powers of the PRIs, the states in their Panchayat Raj (PR) Acts have made various provisions. Broadly, the states have accorded taxation powers to the grama/village panchayats. One can see the long list of tax sources vested with them (Bohra, 1996; Rajaraman, 2003; Dwaraknath, 2008; Rajasekharan, 2008). The Ministry of Panchayat Raj (MoPR), Government of India, has listed 24 taxes and duties entrusted to village/grama panchayats by various states (MoPR, 2004). The most important among these are property/building tax, vacant land (other than agriculture land) tax, "kolagaram" (tax on the village produce sold in the village by weight, measurement or number) mainly in Andhra Pradesh, tax on advertisements and hoardings, profession and entertainment tax, factory tax and various cesses. In a few states, powers have been given to intermediate and district level panchayats to raise revenues and these are mainly in the nature of assigned revenues such as mineral cess, land/local cess, surcharge on stamp duty, entertainment tax etc. (Rao and Reddy, 1996; Aziz et. al, 2002). Yet, in a few other states, certain taxes such as motor vehicle tax, entertainment tax, profession tax and stamp duty are shared with different tiers of PRIs. Further, the panchayats are empowered to raise non-tax revenues from their own properties and assets such as rent from shops and buildings, auction of trees and fruits, sale of assets, fee on pilgrims and fairs, grazing lands and shandies (markets) and licence fee etc. (Rajaraman, 2003). Apart from these, provisions for statutory and discretionary transfers and borrowings have been provided. Another important provision made in almost all the state PR Acts is constitution of a Finance Commission by the states once in five years in conformity with Article 243(I) of the Constitution.

The above legislative measures both at the Central and state levels, contemplate bestowing a variety of revenue sources to PRIs: own revenue raising powers, assignments, tax sharing, grants-in-aid and borrowing powers.

### Fiscal Position of Three Levels of Government in India

The Constitution of India has demarcated the responsibilities/functions of the Centre and states in three distinct lists under the Seventh Schedule (Government of India, 2005). Similarly, the Eleventh Schedule under Article 243(G) of 73<sup>rd</sup> Amendment specifies 29 broad subjects to be transferred to PRIs by the states (Government of India, no date). As far as the latter is concerned, not all the states have

implemented this in letter and spirit. However, the states, by and large, have entrusted the PRIs with the responsibility of providing essential services such as provision and management of drinking water schemes, streetlights, drainage and sanitation, roads, maintenance of community assets and implementation of some rural development and poverty alleviation programmes. It is interesting to note from Table I that 13 out of 18 major states, have transferred more than 15 subjects mentioned under the Eleventh Schedule to PRIs. Out of the 13 states, six states namely Assam, Karnataka, Chattisgarh, Rajasthan, Tamil Nadu and West Bengal have transferred all the 29 subjects. It may be noted here that the tasks involved at the grassroots level are gigantic. This requires adequate resources and functionaries. However, with regard to these two, the states have not shown the same zeal as they did while devolving the functions. A few exceptions are Karnataka, Kerala, Maharashtra, Rajasthan, Gujarat and West Bengal.

State			transferred to ith funds and ies		s, funds and e transferred to ts	
	Functions	Funds	Functionaries	Functions	Funds	Functionaries
Andhra Pradesh	17	5	2	12	24	27
Assam	29	0	0	0	29	29
Bihar	5	8	*	23	21	29
Jharkhand	^	^	^	NA	NA	NA
Gujarat	15	15	15	14	14	14
Haryana	16	0	0	13	29	29
Karnataka	29	29	29	0	0	0
Kerala	26	26	26	3	3	3
Madhya Pradesh	23	10	9	6	19	20
Chattisgarh	29	10	9	0	19	20
Maharashtra	18	18	18	11	11	11
Orissa	25	9	21	4	20	8
Punjab	7	0	0	22	29	29
Rajasthan	29	18	18	0	11	11
Tamil Nadu	29	0	0	0	29	29
Uttar Pradesh	12	4	6	17	25	23
Uttarancha	11	0	11	18	29	18
West Bengal	29	12	12	0	17	17

Table 1: Extent of Devolution of Functions, Funds and Functionaries to Panchayat Raj Institutions in Major States as on 1-4-2004

**Notes:** \* - only functional control; ^- Elections to PRIs yet to be held; NA - not applicable **Source:** Website of Ministry of Panchayat Raj, Government of India.

A related issue at the macro level is the extent of revenues available to each level of government in the combined revenues. Table 2 provides the information on the relative position of PRIs, states and the Centre in the resource availability. It can be seen from the table that the share of tax revenue of PRIs in the combined tax revenues was 0.17 per cent during 1997-98 and it increased to 0.26 in 2002-03. On the other hand, the shares of state governments and the Central government in those years were 55.88 and 45.95 per cent respectively in both the years. Again, if we look at the shares of each level of government in the total resources, i.e., revenue and capital receipts together of

all the governments the situation is no different from the earlier scenario. It can be seen from the same table that the share of PRIs in the combined receipts during 1997-98 was four per cent and the same declined to three per cent in 2002-03. Against this pattern, the shares of states and the Centre was around 48 per cent in both the above periods. A study of revenues of local bodies (rural and urban) in India also brings out the same situation as it reveals that during 1997-98 the share of local bodies in the gross state domestic product (GSDP) was 2.1 per cent in contrast to Centre's 6.8 per cent and States' 10.9 per cent (Rao, 2000). In contrast, in certain countries the share of local governments in the total tax revenue ranges between 11 and 20 per cent (Bohra, 2008: 27). These facts clearly show that very little fiscal decentralisation has taken place below the state level in India.

Table 2: Share of Different Levels of Government in the Combined Revenue Receipts in India^

Government	1997	-98	2002-03		
Tier	Tax Revenue	Total Receipts*	Tax Revenue	Total Receipts*	
1. PRIs	376.91	19355.54	928.71	24010.52	
	(0.17)	(4.01)	(0.26)	(3.20)	
2. States	121641.00	230238.00	196494.00	369000.61	
	(55.88)	(47.71)	(55.01)	(49.19)	
3. Centre (net)	95672.00	232963	159763.00	357131.72	
	(43.95)	(48.28)	(44.73)	(47.61)	
Total of Three Tier Governments	217689.91 (100.00)	482556.54 (100.00)	357185.71 (100.00)	750142.85 (100.00)	

**Notes:** 1. ^ - Constitute rough estimate; 2. \* include revenue and capital receipts; 3. Figures in parenthesis are percentages to the respective column totals

Source: Computed by the author using the data from: 1. Ministry of Finance, 2005;

2. Government of India, 2000, 2004.

# Growth and Composition of Revenues

Even though the relative share of PRIs in the combined receipts of all level of governments is very low, it is very useful to analyse the trends in the revenues available to PRIs in different states. This is measured in terms of per capita and ratio to state income i.e. net state domestic product (NSDP). The information on the extent of availability of resources for PRIs in major states is presented in Table 3. It can be seen from the table that the per capita revenue of PRIs at the level of all states was Rs.308 during 1997-98 and the same went up to Rs.349 in 2002-03. The state-wise position reveals that in four states (Karnataka, Gujarat, Maharashtra and Andhra Pradesh) out of 15, the per capita revenue exceeded Rs. 500 per annum during 1997-98. In another five states (Kerala, Madhya Pradesh, Orissa, Rajasthan and Tamil Nadu) the same varied between Rs.100 and Rs.500. However, if we take a cut off point i.e. the average of all states (Rs.308) then only seven states figure out. The situation during 2002-03 was not encouraging either. It may be observed from the same table that out of 15 states, the per capita revenue had increased only in seven and in the remaining eight states, it had actually declined. The decline has been noticed in the progressive states (in terms of decentralisation) such as Kerala, West Bengal and Rajasthan.

r				(Rs. Crores)				
		19	997-98	-		20	02-03	
State	PRIs Total Revenue		Per capita Revenue** (Rs.)	PRIs Share in NSDP (%)	PRIs Total Revenue	Net State Domestic Product*		PRIs Share in NSDP (%)
Andhra Pradesh	2511.59	85791	517	2.93	4579.15	145198	827	3.15
Assam	15.5	20211	8	0.08	7.61	32583	3	0.02
Bihar	365.96	30307	49	1.21	295.93	51325	40	0.58
Gujarat	2232.54	77266	825	2.89	3302.37	118513	1042	2.79
Haryana	85	33909	69	0.25	376.37	58655	251	0.64
Karnataka	3768.07	64757	1213	5.82	4303.03	100406	1233	4.29
Kerala	982.77	44883	451	2.19	960.69	71064	407	1.35
Madhya Pradesh	1779.01	53141	350	3.35	478.52	71646	108	0.67
Maharashtra	3307.47	172530	683	1.92	5337.2	259042	956	2.06
Orissa	640.02	28000	233	2.29	187.84	38737	60	0.48
Punjab	135.41	43099	95	0.31	178.55	64094	111	0.28
Rajasthan	1520.21	56912	448	2.67	1811.63	75048	418	2.41
Tamil Nadu	422.16	92689	115	0.46	890.58	135252	255	0.66
Uttar Pradesh	883.24	120125	79	0.74	623.21	176076	47	0.35
West Bengal	487.75	89595	99	0.54	177.23	153781	31	0.12
Total of 15 States	19136.93	1013215	308	1.89	23509.91	1551420	349	1.52

Table 3: Major State-wise Revenue Position of PRIs in India during 1997-98 and 2002-03

\* At current prices; \*\* Based on projected rural population for the year 1997-98; ^ Based on 2001 rural Notes: population Source: Calculated by the author from the original data from 1. Government of India, 2000, 2004;

2. Ministry of Finance, 2005.

Another measure, i.e., the ratio of revenue to NSDP also unfolds the degree of fiscal decentralisation achieved at the sub-state level. It can be seen from the same Table 3 that in 1997-98 the ratio of revenue at the all states level in the total NSDP was 1.89 per cent. The ratio in eight states exceeded the all states average. The highest share was observed in Karnataka followed by Madhya Pradesh, Andhra Pradesh, Gujarat, Rajasthan, Orissa and Kerala. The position in 2002-03 was that the average percentage share of PRIs revenue in the total NSDP declined to 1.52 from 1.89 per cent noticed during 1997-98. Not only this, the share had declined in all but two states. Karnataka was far ahead of other states in terms of both per capita and ratio to NSDP in both the periods. However, compared to 1990s, a decline was visible during 2000s in most of the states. This implies that a rise in the states' income had not proportionately increased the revenues of PRIs. A similar study which has considered indicators other than per capita and NSDP such as states' own revenue, states' total revenue also arrives at the above conclusions (Oommen, 2006).

As far as the composition of revenues of PRIs was concerned, in almost all the states the own revenue (tax and non-tax) in their total revenues was very negligible. For instance, the computation of data (Table 4) reveal that at the all states level the share of own revenue of PRIs in their total revenues was 4.02 per cent in 1994-95 and it had risen to 6.84 per cent in 2002-03. On the other hand, the transferred and other revenue (assigned, shared and grants) accounted for 95.98 per cent and 93.16 per cent respectively in the above periods. Another point to be noted is that own revenues of PRIs

largely accrued from grama panchayats. Indirectly, it meant that taxation powers had been given to the lower tier of panchayats in most of the states as stated earlier. Similarly, larger share of non-tax revenue came from GPs. The total share of non-tax revenue in the total revenues was very negligible at 1.5 to 3 per cent between 1994-95 and 2002-03. The above information reveals that the PRIs were highly dependent on the transfers from higher level governments.

								(in Perc	entages)
Panchayat Tier and Source	Year								
of Revenue	1994- 95	1995- 96	1996- 97	1997- 98	1998- 99	1999- 2000	2000- 01	2001- 02	2002- 03
		Ow	n Tax R	evenue					
Grama Panchayats	6.20	6.65	7.01	6.47	NA	NA	NA	NA	NA
Block/Taluk Panchayats	0.41	0.43	0.39	0.35	NA	NA	NA	NA	NA
Zilla/District Panchayats	0.17	0.16	0.13	0.10	NA	NA	NA	NA	NA
Total of Three Tiers	2.15	2.22	2.13	1.95	3.64	3.04	3.24	3.61	3.87
	-	Own	Non-tax	Revenu	le				-
Grama Panchayats	4.11	4.06	4.04	3.97	NA	NA	NA	NA	NA
Block/Taluk Panchayats	0.53	0.56	0.44	0.44	NA	NA	NA	NA	NA
Zilla/District Panchayats	0.97	0.83	0.74	0.68	NA	NA	NA	NA	NA
Total of Three Tiers	1.87	1.77	1.60	1.55	3.07	2.95	2.86	2.77	2.98
	Total	Own Re	evenue (	Tax and	l Non-ta	ax)			-
Grama Panchayats	10.31	10.71	11.05	10.43	NA	NA	NA	NA	NA
Block/Taluk Panchayats	0.94	0.98	0.83	0.79	NA	NA	NA	NA	NA
Zilla/District Panchayats	1.13	0.99	0.87	0.77	NA	NA	NA	NA	NA
Total of Three Tiers	4.02	3.99	3.73	3.50	6.71	5.99	6.10	6.38	6.84
	-	Other F	evenue	(Transf	ers)				-
Grama Panchayats	89.69	89.29	88.95	89.57	NA	NA	NA	NA	NA
Block/Taluk Panchayats	99.06	99.02	99.17	99.21	NA	NA	NA	NA	NA
Zilla/District Panchayats	98.87	99.01	99.13	99.23	NA	NA	NA	NA	NA
Total of Three Tiers	95.98	96.01	96.27	96.50	93.29	94.01	93.90	93.62	93.16

Note: NA - not available

Source: Computed by the author from the data given in - Government of India, 2000, 2004.

It is also important to talk about the states, where the panchayats have relatively performed better in resource mobilisation. This information is presented in Table 5. It can be seen from the table that in states such as Punjab, Madhya Pradesh, Kerala and Haryana the own revenues of PRIs in their total revenues were more than 20 per cent. In West Bengal and Uttar Pradesh, it ranged between 10 and 15 per cent. In the remaining states own share accounted for less than eight per cent.

Table 5: Composition of Revenues of Panchayat Raj Institutions in Major States of India

		1997-98			2002-03	
State	Own Revenue (Tax & Non-tax)	Transferred Revenue	Total Revenue	Own Revenue (Tax & Non-tax)	Transferred Revenue	Total Revenue
Andhra Pradesh	137.80	2373.79	2511.59	170.83	4408.3	4579.15
	(5.49)	(94.51)	(100.00)	(3.73)	(96.27)	(100.00)
Assam	3.46	12.04	15.50	7.61	0	7.61
	(22.32)	(77.68)	(100.00)	(100.00)	(0.00)	(100.00)
Bihar	0	365.96	365.96	6.67	289.26	295.93
	(0.00)	(100.00)	(100.00)	(2.25)	(97.75)	(100.00)
Gujarat	40.36	2192.18	2232.54	69.86	3232.51	3302.37
	(1.81)	(98.19)	(100.00)	(2.12)	(97.88)	(100.00)
Haryana	53.01	32.21	85.22	78.36	298.01	376.37
	(62.20)	(37.80)	(100.00)	(20.82)	(79.18)	(100.00)
Karnataka	30.14	3737.93	3768.07	59.46	4243.57	4303.03
	(0.80)	(99.20)	(100.00)	(1.38)	(98.62)	(100.00)
Kerala	99.09	883.67	982.77	226.01	734.68	960.69
	(10.08)	(89.92)	(100.00)	(23.53)	(76.47)	(100.00)
Madhya Pradesh	32.04	1746.94	1779.01	174.81	303.7	478.52
	(1.80)	(98.20)	(100.00)	(36.53)	(63.47)	(100.00)
Maharashtra	112.17	3195.30	3307.47	470.07	4867.14	5337.20
	(3.39)	(96.61)	(100.00)	(8.81)	(91.19)	(100.00)
Orissa	6.99	633.03	640.02	5.51	182.33	187.84
	(1.09)	(98.91)	(100.00)	(2.93)	(97.07)	(100.00)
Punjab	53.87	81.54	135.41	98.77	79.78	178.55
	(39.78)	(60.22)	(100.00)	(55.32)	(44.68)	(100.00)
Rajasthan	30.75	1489.46	1520.21	37.68	1773.94	1811.63
	(2.02)	(97.98)	(100.00)	(2.08)	(97.92)	(100.00)
Tamil Nadu	34.04	388.13	422.16	65.44	825.14	890.58
	(8.06)	(91.94)	(100.00)	(7.35)	(92.65)	(100.00)
Uttar Pradesh	46.65	836.59	883.24	63.17	560.04	623.21
	(5.28)	(94.72)	(100.00)	(10.14)	(89.86)	(100.00)
West Bengal	19.59	468.16	487.75	31.27	145.96	177.23
	(4.02)	(95.98)	(100.00)	(17.64)	(82.36)	(100.00)
All States Total	677.08	18678.47	19355.54	1643.51	22367.01	24010.52
	(3.50)	(96.50)	(100.00)	(6.84)	(93.16)	(100.00)

**Note:** Figures in parenthesis are percentages to row totals.

Source: Same as in Table 4.

## PRIs and Borrowings

Borrowings play an important role in development finance. In India, the development expenditures of both Central and state governments are largely met from borrowed funds (capital receipts). Many state governments intended to provide this facility to their panchayat bodies. In this direction, many of the states in their PR Acts have made a provision for borrowings by the panchayats. However, there was no evidence of any panchayat making use of this statutory power. The main reason for this was stiff conditions laid down for raising loans. In Karnataka for instance, the PR Act stipulates that: 1) the

Panchayat which intend to raise loans (development purpose only) must seek prior permission/guarantee from the state government, and 2) provide for 'Sinking Fund'. In the first place the chances of state governments giving guarantee to local government borrowings are highly doubtful and as far as the second condition is concerned it requires sufficient own revenues so that they could apportion a portion of that to the Sinking Fund Account. However, it is highly improbable from the present local governments' fiscal powers to fulfil the second condition.

State	Recommendations	Status	
	9.14 % of the tax and non-tax revenues of the state to PRIs	Accepted	
Andhra Pradesh	Increase of per capita grant to GPs from Rs.1 to Rs.4, Rs.5 to Rs. 8 to MPs, Rs.2 to Rs. 4 for ZPs	Accepted	
Bihar	SFC constituted	Details not available	
Gujarat	SFC constituted	Details not available	
Karnataka	Transferring 36 % of the state's non-loan gross own revenue receipts	Accepted	
	30.6 % to PRIs and 5.4 % to Urban local bodies	Accepted	
	25% of net motor vehicle tax collection to Local Bodies	Accepted	
Kerala	Proceeds of building tax to village panchayats and municipalities	Accepted	
	Earmarking a portion of income from the sale of court fee stamps to Local Bodies	Accepted	
	Grants to GPs to discharge their functions	Accepted	
Madhua Dradaah	Agency fee to Janpad and ZPs for carrying out Agency functions	Accepted	
Madhya Pradesh	for providing tied and untied grants	Not accepted	
	A lump-sum non-recurring grants	Accepted	
Maharashtra	A total of 129 recommendations (12 were accepted)	Details not available	
	Maintenance of registers and forms for maintaining proper accounts and records by each local body	Accepted	
Assam	Share of state taxes for transfer to local bodies to be 2 % in each year	Accepted	
	Transfer of 10 % of net proceeds of motor vehicle tax	Accepted	
Oricco	Massive external assistance to local bodies to upgrade basic services	Not known	
Orissa	Surcharge on stamp duty for transfer of properties in rural areas	Not known	
	Assignment of land revenue to GPs	Accepted	
Punjab	Sharing of 20 % of the net proceeds of the stamp duties, motor vehicle tax, electricity duty and entertainment tax with PRIs and municipalities	Accepted	
Rajasthan	To devolve 2.18% of the net proceeds of the state's own tax revenue to PRIs	Accepted	
<b>,</b>	To provide 50% matching grant	Accepted	
	Assigning local cess, surcharge on stamp duty to PRIs	Accepted	
Tamil Nadu	90% of entertainment tax to PRIs	Accepted	
	8% of total state tax revenues	Accepted	
Uttar Pradesh	SFC constituted	Details not available	
West Bengal	Sharing of 16% of the net proceeds of all the taxes collected by state with PRIs and municipalities	Accepted	

Table 6: Major Recommendations of First State Finance Commissions of Major States
---

Source: Rajiv Gandhi Foundation, 2000.

## **SFCs and Panchayat Finances**

As mentioned earlier, an SFC is expected to study the financial requirements and bestow revenueraising powers and determine the quantum of grants-in-aid to be given to PRIs. In this regard a cursory look at the recommendations of various first SFCs as given in Table 6 above reveals the piecemeal assignment of tax powers and share from states' revenues. Only two SFCs (Karnataka and West Bengal) recommended global sharing i.e. sharing of total own revenues of the state with PRIs. The SFCs of Andhra Pradesh, Assam, Rajasthan and Tamil Nadu, had recommended partial sharing of state's total own revenues. Against this a majority of the SFCs recommended individual tax sharing albeit the sales tax revenue, which was an elastic and buoyant source of revenue for the states.

Another point that is worth noting here is that the states were enthusiastic in constituting first FCs and to a limited extent took action to implement their recommendations. However, this enthusiasm waned out while implementing the second SFCs' recommendations. A look at the information on the status of second SFCs (Table 7) shows that out of 15 major states, SFCs in two were yet to submit their reports. In eight states where reports had been submitted, 'Action Taken Report' (ATRs) was not submitted to their respective legislature. Only five states submitted ATRs. In most of the states, the second FCs' period of coverage of recommendations ended in 2005-06. Thus the above information brings out the fact that the states were lukewarm to the idea of setting up FC, to take action and implement the recommendations. In other words, the states were not in favour of making PRIs fiscally autonomous and stronger institutions.

State	Date of Constitution	Date of Submission	Date of Submission of ATR	Period Covered by SFC
1. Andhra Pradesh	08-12-1998	19-08-2002	31-3-2003	2000-01 to 2004-05
2. Assam	18-4-2001	18-08-2003	Not submitted	2001-02 to 2005-06
3. Bihar	1-6-1999	RLB-September, 2001	Not submitted	-
3. DILIAI	1-0-1999	ULB- January, 2003	Not submitted	-
4. Gujarat	19-11-2003	Not submitted	-	2005-06 to 2009-10
5. Haryana	06-09-2000	Not submitted	-	2001-02 to 2005-06
6. Karnataka	October, 2000	December, 2002	Not submitted	2003-04 to 2007-08
7. Kerala	23-06-1999	January, 2001	Not submitted	2000-01 to 2005-06
8. Madhya Pradesh	17-06-1999	July, 2003	Not submitted	2001-02 to 2005-06
9. Maharashtra	22-06-1999	30-03-2002	Not submitted	2001-02 to 2005-06
10. Orissa	05-06-2003	25-10-2003	Not submitted	2005-06 to 2009-10
11. Punjab	Sept. 2000	15-02-2002	08-06-2002	2001-02 to 2005-06
12. Rajasthan	07-05-1999	30-08-2001	26-03-2002	2000-01 to 2004-05
13. Tamil Nadu	02-12-1999	21-05-2001	08-05-2002	2002-03 to 2006-07
14. Uttar Pradesh	February, 2000	June, 2002	30-04-2004	2001-02 to 2005-06
15. West Bengal	14-07-2000	06-02-2002	Not submitted	2001-02 to 2005-06

Table 7: Status and Action Taken on Second SFC Reports by Major States

Source: Government of India, 'Report of the Twelfth Finance Commission (2005-10)', 2004.

## **Central Finance Commissions and Panchayat Finances**

As highlighted in the beginning, Articles 280(bb) and 280(C) of the Constitution place additional responsibility on the Central Finance Commission to augment the Consolidated Fund of a state to supplement the resources of the panchayats and municipalities in the state on the basis of the recommendations made by the Finance Commission of the state (Government of India, 2005: 117). When the Tenth FC was constituted there were no terms of reference (ToR) on the issue of panchayat finances. However, the Commission on its own took interest on the needs of panchayats. While examining the financial equirements of PRIs, the Commission had to face a number of obstacles (Government of India, 1996). As a result, it recommended only *ad hoc* grants. It recommended Rs.100 per capita of rural population of 1971 Census for the award period. It worked out to Rs.4880.93 crore for a period of five years starting from 1996-97.

Unlike the Tenth FC, the Eleventh FC had a ToR to look into the resources of local bodies and to recommend grants on the basis of recommendations of SFCs. To its dismay, the Commission had to face a number of obstacles like late constitution of SFCs and non-submission of ATRs etc. In spite of these constraints it took a dynamic view and recommended a total of Rs.8000 crore (Rs.1600 crore per year) to PRIs for five years from 2000-01 to 2005-06. It had recommended a set of criteria for horizontal distribution of grants and one of the innovative criterion was "Index of Decentralisation" The intention behind this criterion was to force the states to empower PRIs with functions and resources (Babu, 2002a).

The Twelfth FC had a clear mandate from the Central Government through ToR to suggest measures to augment the Consolidated Fund of the states to supplement the needs of local bodies. Similar to the earlier Commissions, the Twelfth FC had also problems relating to SFC reports. After seeking various information from the states concerned, it recommended a total of Rs.25,000 crore for a period of five years (2005-10) for both rural and urban local bodies. This, as per the Commission, worked out to 1.24 per cent of the sharable tax revenues and 0.9 per cent of gross revenue receipts of the Centre. Of the total Rs.25,000 crore the share fixed for PRIs was Rs.20,000 crore. This grant amount was substantial compared to the 11<sup>th</sup> FC's recommended share. However, it seems in percentage terms (in relation to Centre's revenues) there is not much difference between the 11<sup>th</sup> and 12<sup>th</sup> FCs recommended share. For instance, the 11<sup>th</sup> FC recommended Rs.1600 crore to PRIs per year from 2001-02. In 2001-02 the Centre's ret sharable tax revenue receipts was Rs.179762 crore. The PRIs share works out to 0.89 per cent. However, in per capita terms, it is quite higher than that of 11<sup>th</sup> FC's recommended share.

# **Concluding Observations**

The preceding analysis of the resources of PRIs in India brings out many interesting points. It is almost 16 years since 73<sup>rd</sup> Amendment was effected to the Indian Constitution, the governments are yet to evolve an acceptable fiscal decentralisation. It seems that in some of the states history was repeating. No lesson was learnt from the failure of PRIs in the earlier attempts. The states strongly protesting (during 1970s and 1980s) against the Centre's dominance over the resources and making inroads into the states' subjects, have now forgotten this in state - PRIs relation. The Centre's dominance over the

resources is revealed from a large body of literature on the subject, discussions in the National Development Council meetings and constitution of Sarkaria Commission (Government of India, 1988). There was no proper implementation of the legislative measures incorporated in the Constitution as well as in the state PR Acts relating to finances of the PRIs. Many of the provisions, specially the fiscal provisions, are not mandatory and this has become handy for most of the states to have bigger say in PRIs resources.

The availability of resources for PRIs in the combined revenues of all level governments is very negligible. This means, as brought out earlier, the resources are concentrated at the states and the Central level. A study states that "...... Politically driven decentralisation processes run the risk, as the current cases of India and Spain demonstrate an unbalanced structure where most of the fiscal powers on the expenditure and revenue side of the budget remain at the state/provincial level, with these governments acting as centralised regimes towards their local governments (Bahl and Jorge, 2005: 57). There is need for reversing this trend. If PRIs have to function like autonomous/self governing institutions, they need own resource-raising powers (tax, non-tax and borrowings). The analysis in this paper has brought out that there exists very little autonomy at the panchayat level. The share of own revenue of PRIs in their total revenues was around six per cent only. The dependency level is very high. The foremost factor for this trend is that the PRIs are given the slowest growing revenue sources. This calls for devolution of significant tax sources to them. If this is not tenable for some economic reasons, then a fixed share in the state's total revenues are to be given to the PRIs. This type of arrangement has been evolved in India for the first time between the Centre and the states since 2000-01 on the recommendations of the 10<sup>th</sup> Finance Commission of India (Government of India, 1996). In fact, as stated elsewhere in this paper, some of the first SFCs (Karnataka and West Bengal) recommended fixed share from the states' own total revenues to PRIs and in states such as Andhra Pradesh, Assam, Rajasthan and Tamil Nadu, apart from recommending sharing of specific state taxes with the PRIs, also recommended a fixed share from the state's total own revenues (Table 5). Instead of following this kind of dual method of sharing individual taxes and also a share from the total revenues of the state it is appropriate for all the concerned to go for a fixed share method. The SFCs must strive for this kind of resource distribution between the state and the local governments. This will have the advantages of proportionate increase in the local government revenues and predictability in the resource availability.

The experience shows that the states are not bothered to take action on the SFC reports. This is against the spirit of Constitutional provision. They have to follow the convention set by the Centre in implementing the CFC recommendations with the states. Further, the role of CFC in supplementing the resources of local governments is very important. However, the three FCs at the Central level followed *ad hoc* measures without any impact on the local government finances. The present 13<sup>th</sup> FC of India has to link its recommendations not only to the recommendations of SFC but also on the states' implementation. Alok (2008) opines that the *ad hoc* grants of a token nature given by the earlier CFCs now need to be replaced by regular transfer arrangement. The 13<sup>th</sup> FC should make recommendations in such a way that it compel the states to devolve functions, functionaries and funds.

The Centre has been sponsoring a large number of programmes for poverty alleviation and rural development under Centrally Sponsored Schemes (CSSs) and Central Plan Schemes (CPSs) and

implemented through the District Rural Development Agency (DRDA) at the district level. Unfortunately, a large number of states such as Andhra Pradesh, Assam, Bihar, Gujarat, Haryana, Jharkhand, Kerala, Maharashtra, Orissa, Punjab, Tamil Nadu, Uttaranchal and Uttar Pradesh retained their identity separately, thus holding power over those programmes by itself through the line department personnel (Institute of Rural Management, 2008: 55-56). Hence the Centre should insist on the states to transfer/implement its programmes/schemes through PRIs and bringing DRDAs under the control of panchayats.

In a majority of states the plan resources are spent through parallel institutions like Janmabhoomi in AP (Babu, 2002b), MPLADF (Member of Parliament Local Area Development Fund) in the entire country, MLA/MLC LADF in most of the states and user associations for various functions/services (watershed, drinking water, school development committees) in a majority of states etc. They target the same people and area as the PRIs leading to duplication of works, wasteful expenditure and leakage of funds. Further, such expenditure lack transparency and accountability. Therefore, to minimise the waste of scarce resources and accountability in spending it is logical to bring all those functions concerning local development under PRIs governance and planning.

Borrowings play an important role in financing long-lived infrastructure assets. Many of the state PR Acts provided for borrowings by the panchayats. However, in practice, only the Centre and the states are raising and utilising the borrowed funds. In recent years a few urban local governments have raised resources from the financial markets and institutions (Gurjar, 2008; Vaidya, 2008). There should be some mechanism whereby the borrowed funds are also available for panchayats. The PRIs could not access capital markets due to imposition of elaborate conditions. As a solution to this problem the states should share a part of its borrowings with the panchayats who wish to borrow for development projects and getting back the money on instalment basis by a cut in the annual grants. This facility may be restricted to zilla and taluk panchayats which do not have taxation powers but have experience in implementing and managing productive projects.

#### References

- Aziz, Abdul, N Sivanna, M Devendra Babu, Madhushree Sekher and C Charles Nelson (2002). Decentralised Governance and Planning: A Comparative Study in Three South Indian States. New Delhi: Macmillan.
- Alok, V N (2008). 'Devolution of Resources to Local Governments: Role of the XIII Finance Commission'.
  In Conference on Issues Before the 13<sup>th</sup> Finance Commission: Empowering the Panchayati Raj Institutions, organised by Institute of Rural Management, Anand, December 22-23, 2008.
- Babu, M Devendra (2002a). Eleventh Finance Commission's Recommendations and the Local Bodies: Impact across the States. *Management in Government*, Vol. XXXIV, No. 2.
- ———— (2002b). Working of Gram Sabhas in Andhra Pradesh: Problems and Prospects. Working Paper No. 103. Bangalore: Institute for Social and Economic Change.

- Bahl, Roy (1999). 'Implementation Rules for Fiscal Decentralisation'. Paper presented at the International Seminar on Land Policy and Economic Development, organised by Land Reform Training Institute, Taiwan, November 17, 1998.
- Bahl, Roy and Jorge Martinez-Vazquez (2005). 'Sequencing Fiscal Decentralisation' (an unpublished paper). Andrew Young School of Policy Studies, Atlanta, Georgia: Georgia State University.
- Bird, Richard, M and Michael Smart (2002). Intergovernmental Fiscal Transfers: International Lessons for Developing Countries. *World Development*, Vol. 30, No. 6.
- Bohra, O P (1996). 'Financial Resources of Panchayats in India'. In Conference on *Emerging Trends in State-Local Fiscal Relations in India*, Organised by National Institute of Rural Development, Hyderabad, December 18-19, 1996.
- ———— (2008). 'Resource Mobilisation of Local Governments in India: A Central Finance Commission Approach'. In M R Biju (ed), *Financial Management of Panchayati Raj System*. New Delhi: Kanishka, 2008.
- Dwaraknath, H D (2008). 'Finances of Panchayati Raj Institutions in Andhra Pradesh'. In M R Biju (ed), *Financial Management of Panchayati Raj System*. New Delhi: Kanishka, 2008.
- Government of India (1988). Report of the Commission on Centre State Relations (Sarkaria Commission). Nasik: Government of India Press.
- ------ (no date) The Constitution Seventy-Third Amendment Act. New Delhi
- ----- (1996). Report of the Tenth Finance Commission (for 1996-2000). New Delhi.
- ----- (2000). Report of the Eleventh Finance Commission (for 2000-2005). New Delhi.
- ----- (2004). Report of the Twelfth Finance Commission 2005-10. New Delhi.
- ——— (2005). The Constitution of India (as on the 26<sup>th</sup> January, 2005).
- Gurjar, Sumedh (2008). Best Practices in Financial Management of Urban Local Bodies. In Conference on *Issues Before the 13<sup>th</sup> Finance Commission: Empowering the Panchayati Raj Institutions*, organised by Institute of Rural Management, December 22-23, 2008, Anand.
- Institute of Rural Management (2008). The State of Panchayats: 2007-08, Vol. I. Anand.
- Ministry of Finance (2005). Indian Public Finance Statistics 2004-05. Government of India.
- Ministry of Panchayat Raj (2004). Fifth Round Table of Minister in-charge of Panchayati Raj, 28-29 October, 2004, Srinagar, India.
- Musgrave, Richard A (1959). The Theory of Public Finance: A Study in Public Economy. New York: McGraw-Hill.
- Oommen, M A (2006). Fiscal Decentralisation to the Sub-State Level Governments. *Economic and Political Weekly*, Vol. XLI, No. 10.
- Rajaraman, Indira (2003). Fiscal Domain for Panchayats, New Delhi: Oxford University Press.
- Rajasekharan, K (2008). Local Government Finance in Kerala. In M R Biju (ed), *Financial Management of Panchayati Raj System*, New Delhi: Kanishka, 2008.
- Rajiv Gandhi Foundation (2000). Panchayati Raj in India: Status Report 1999. New Delhi.
- Rao, Govinda M (2000). *Fiscal Decentralisation in Indian Federalism* (an unpublished paper). Bangalore: Institute for Social and Economic Change.

- Rao, Ranga, S P and P Syam Sundar Reddy (1996). 'State-Local Financial Relations in Andhra Pradesh'.
  In Conference on *Emerging Trends in State-Local Fiscal Relations in India*, organised by National Institute of Rural Development, Hyderabad, December 18-19, 1996.
- Shah, Anwar (2007). 'Institutional Arrangements for Intergovernmental Fiscal Transfers and a Framework for Evaluation'. In Boadway, Robin, and Anwar Shah (eds), Intergovernmental Fiscal Transfers - Principles and Practice. Washington D.C.: World Bank.
- Tiebout, Charles M (1956). A Pure Theory of Local Expenditures. *Journal of Political Economy*, Vol. 64, No. 5.
- Vaidya, Chetan (2008). 'Market-Based Financing of Urban Infrastructure in India'. In Conference on Issues Before the 13<sup>th</sup> Finance Commission: Empowering the Panchayati Raj Institutions, organised by Institute of Rural Management, December 22-23, 2008, Anand.
- World Bank (1988). World Development Report. New York: Oxford University Press.

# **Recent Working Papers**

- 167 Significance of Income Generating Activities under Micro-Finance: A Study of Micro-Finance Groups in Wayanad District, Kerala Emil Mathew
- 168 Financing Rural Drinking Water Supply: A Case Study of Karnataka Veerashekharappa, K V Raju and S Manasi
- 169 Employment Security of the Unorganised Sector Workers in Karnataka D Rajasekhar and J Y Suchitra
- 170 Non-Agricultural Employment for Young Women in India: Status, Opportunity and Ways Forward D Rajasekhar
- 171 Community Contribution for Enviornmental Sanitation: Myth or Reality? Veerashekharappa
- 172 Does Repayment Indicate the Success of Micro-Finance Programme? Emil Mathew
- 173 Community Participation in Rural Water Supply: An Analysis Using Household Data from North Kerala Nisha K R
- 174 Urbanisation in a Forward Looking Statpe of India: Patterns Issues and Policy G S Sastry
- 175 Contract Labour Act in India: A Pragmatic View Meenakshi Rajeev
- 176 Issues of Unaccounted for Water in the Urban Water Sector G S Sastry
- 177 Liberalisation and Efficiency of Indian Commercial Banks: A Stochastic Frontier Analysis

H P Mahesh

178 Power Sharing in the Panchayats of Orissa

Pratyusna Patnaik

- 179 Can Career-Minded Young Women Reverse Gender Discrimination? Alice W Clark and T V Sekher
- **180 People's Participation in Environmental Protection: A Case Study of Patancheru** Geetanjoy Sahu
- **181 Efficiency and Bureaucracy** Anitha V
- 182 Reproductive and Child Health Programmes in the Urban Slums of Bangalore City: A Study on Unmet Needs fro Family Welfare Services C S Veeramatha
- 183 Demographic Change and Gender Inequality: A Comparative Study of Madhya Pradesh and Karnataka C M Lakshmana

- 184 Increasing Ground Water Dependency and Declinin Water Quality in Urban Water Supply: A Comparative Analysis of Four South Indian Cities K V Raju, N Latha and S Manasi
- 185 Impact of Land Use Regulations on Suburbanisation: Evidence from India's Cities Kala Seetharam Sridhar
- 186 Socio-Economic Determinants of Women Leadeship at the Grass - Roots K C Smitha
- 187 Groundwater for Agriculural Use in India: An Institutional Perspective Sarbani Mukherjee
- 188 Comparative Study of Traditional Vs. Scientific Shrimp Farming in West Bengal: A Technical Efficiency Analysis Poulomi Bhattacharya
- 189 Urban and Service Delivery in Bangalore: Public-Private Partnership Smitha K C and Sangita S N
- 190 Social Capital in Forest Governance Regimes Sangita S N
- 191 Agriculture in Karnataka: A Historical View After the Fall of Serirangapatana R S Deshpande and Malini Tantri
- **192 Personality Traits and Administrators** Anitha V
- 193 Sustainability of Indian Agriculture: Towards an Assessment V M Rao
- 194 Emerging Development Issues of Greater Bangalore G S Sastry
- 195 Rural Infrastructure Development Fund: Need for a Track Change Meenakshi Rajeev
- 196 Emerging Ground Water Crisis in Urban Areas — A Case Study of Ward No. 39, Bangalore City K V Raju, S Manasi and N Latha
- 197 In Pursuit of India's Export earning advantage: An Assessment of IT-Enabled Services Industry Meenakshi Rajeev
- **198 A Patriarchal Link to HIV/AIDS in India** Skylab Sahu
- 199 Collective Action and Property Rights: Some Critical Issues in the Context of Karnataka K G Gayathri Devi
- 200 State, Society and Inclusive Governance: Community Forests in Andhra Pradesh, Karnataka and Orissa S N Sangita
- 201 Urban Poverty and Links with the Environment: An Exploration K G Gayathri Devi

- 202 Groundwater Over-exploitation, Costs and Adoption Measures in the Central Dry Zone of Karnataka Anantha K H and K V Raju
- 203 Changing Child Population: Growth, Trends and Levels in Karnataka C M Lakshmana
- 204 Awareness About HIV/AIDS Among Karnataka Woment: An Analysis of RCH 2002-04 Data K S Umamani
- 205 The Microfinance Promise in Financial Inclusion and Welfare of the Poor: Evidence from Karnataka, India Naveen K Shetty
- 206 Structure of Central Himalayan Forests Under Different Management Regimes: An Empirical Study Sunil Nautiyal
- 207 Poverty and Natural Resources: Measuring the Links (Some Issues in the Context of Karnataka) K G Gayathri Devi
- 208 Federalism and Decentralisation in India: Andhra Pradesh and Tamil Nadu V Anil Kumar
- 209 Capital, 'Development' and Canal Irrigation in Colonial India Patric McGinn
- 210 Gender, Ecology and Development in Karnataka: Situation and Tasks Ahead K G Gayathri Devi
- 211 Greenhouse Gases Emission and Potential Corbon Sequestration: A Case Study of Semi-Arid Area in South India Lenin Babu and K V Raju
- 212 Emerging Trends in Managing Drinking Water – Case Studies of Coastal Villages in Karnataka Manasi S, Latha N and K V Raju
- 213 Spatio-Temporal Analysis of Forests Under Different Management Regimes Using Landsat and IRS Images Sunil Nautiyal
- 214 Traditional Knowledge System (Medicine): A Case Study of Arakalgud Taluk, Karnataka, India B K Harish, K Lenin Babu
- 215 Tribal Movement in Orissa: A Struggle Against Modernisation? Patibandla Srikant

216 Technological Progress, Scale Effect and Total Factor Productivity Growth in Indian Cement Industry: Panel Estimation of Stochastic Production Frontier Sabuj Kumar Mandal and S Madheswaran

- 217 Fisheries and Livelihoods in Tungabhadra Basin, India: Current Status and Future Possibilities Manasi S, Latha N and K V Raju
- 218 Economics of Shrimp Farming: A Comparative Study of Traditional Vs. Scientific Shrimp Farming in West Bengal Poulomi Bhattacharya
- 219 Output and Input Efficiency of Manufacturing Firms in India: A Case of the Indian Pharmaceutical Sector Mainak Mazumdar, Meenakshi Rajeev and Subhash C Ray
- 220 Panchayats, Hariyali Guidelines and Watershed Development: Lessons from Karnataka N Siyanna
- 221 Gender Differential in Disease Burden: It's Role to Explain Gender Differential in Mortality Biplab Dhak and Mutharayappa R
- 222 Sanitation Strategies in Karnataka: A Review

Veerashekharappa and Shashanka Bhide

223 A Comparative Analysis of Efficiency and productivity of the Indian Pharmaceutical Firms: A Malmquist-Meta-Frontier Approach

Mainak Mazumdar and Meenakshi Rajeev

- 224 Local Governance, Patronage and Accountability in Karnataka and Kerala Anand Inbanathan
- 225 Downward Dividends of Groundwater Irrigation in Hard Rock Areas of Southern Peninsular India Anantha K H
- 226 Trends and Patterns of Private Investment in India Jagannath Mallick
- 227 Environmental Efficiency of the Indian Cement Industry: An Interstate Analysis Sabuj Kumar Mandal and S Madheswaran
- 228 Determinants of Living Arrangements of Elderly in Orissa: An Analysis Akshaya Kumar Panigrahi

ISBN 81-7791-185-6

Price: Rs. 30.00



# INSTITUTE FOR SOCIAL AND ECONOMIC CHANGE

Dr V K R V Rao Road, Nagarabhavi P.O., Bangalore - 560 072, India Phone: 0091-80-23215468, 23215519, 23215592; Fax: 0091-80-23217008 E-mail: lekha@isec.ac.in; Web: www.isec.ac.in