

Fiscal Decentralisation, Rural Development and the Economics of Agglomeration

Ramani Gunatilaka

Even twenty-two years into the economic liberalisation process, objectives of rural development, inter-regional equity and rural poverty reduction remain high priority issues in Sri Lanka's development policy agenda. For, notwithstanding the move to a market-oriented, growth-centred economic policy framework and continued implementation of a range of rural development policies, the majority of Sri Lanka's poor (84 per cent), continue to live in rural areas. Besides, during the period 1985/86 to 1995/96, poverty in rural areas declined much more slowly than in the urban sector (see Table 1). Sluggish growth in the primary sectors of the economy during the same period (see Table 2) is probably a key reason for the slow decline in rural poverty as the majority of poor (45 per cent) remain employed in the agricultural sector. There are also considerable regional disparities in the incidence of poverty. As Table 3 shows, while the total number of poor is fairly evenly distributed among the districts, the proportion of people in

poverty is lowest in the districts of Colombo and Gampaha, despite their greater population density, and highest in Moneragala and Ratnapura.

It is the regional disparity, particularly between the economically dynamic districts of Western Province and the rest, and between the urban sector and the rural sector, that continues to concern policy makers. And even while the political objectives of fiscal decentralisation dominate the on-going policy debate, policy-makers and donors have become increasingly convinced that decentralised structures of government may deliver rural development, increase inter-regional equity and reduce rural poverty far more effectively than centralised structures.

The objective of this paper is to examine what fiscal decentralisation theory and practice have to offer Sri Lankan policy makers intent on achieving these objectives, and it draws on both the New Economic Geography literature as well as the fiscal decentralisation literature in its analysis. The discussion also places the implications of fiscal decentralisation theory for rural development firmly in the context of a macroeconomic policy framework designed to encourage export-oriented economic growth and greater integration with the world market. However, it does not attempt to analyse or to assess the political objectives of Sri Lanka's decentralisation exercise, which remain beyond the scope of this paper.

The analysis is structured as follows: Section 2 defines fiscal decentralisation in economic terms and reviews the insights offered by the decentralisation literature for rural development, inter-regional equity, poverty reduction, and economic growth; Section 3 draws on the New Economic Geography literature and assesses the relevance and implications of fiscal

decentralisation and rural development policies in a macroeconomic framework geared at export-oriented industrialisation; Section 4 concludes.

Fiscal Decentralisation, Inter-regional Equity and Economic Growth

Fiscal decentralisation theory addresses the vertical structure of the public sector, the assignment of functions and instruments to different levels of government, and the ways in which different levels of government relate to one another through instruments such as intergovernmental transfers. Hence, the fiscal decentralisation literature offers insights on ways and means to reduce rural poverty and inter-regional inequity that are grounded within the parameters of fiscal decentralisation theory and practice.

What are these insights?

First, as Bird *et al.* (1995) in their discussion of intergovernmental fiscal relations and poverty alleviation in Viet Nam argue, greater decentralisation of spending and revenue decisions to sub-national units can make sure that pro-poor expenditures (such as local infrastructure, health care and education) reflect the preferences, needs and fiscal abilities of different localities. This is because sub-national and local governments are 'closer to the people' and hence information and transaction costs of service provision are greatly reduced.

Table 1:

Poverty in Sri Lanka by Sector: 1985/86, 1990/91 and 1995/96						
	Incidence of Poverty %					
	Lower Poverty Line			Higher Poverty Line		
	85/86	90/91	95/96	85/86	90/91	95/96
Sri Lanka	27	22	21	41	35	33
Rural Sector	32	24	23	45	38	35
Urban Sector	16	18	12	27	28	21
Estate Sector	14	13	12	31	28	27

Depth of Poverty %						
	Lower Poverty Line			Higher Poverty Line		
	85/86	90/91	95/96	85/86	90/91	95/96
Sri Lanka	7	5	4	11	9	8
Rural Sector	8	5	5	13	10	9
Urban Sector	3	4	2	7	7	5
Estate Sector	4	2	2	8	5	5

Notes: Estimates based on consumption needs. Lower Poverty Line denotes minimum expenditure necessary to reach minimum nutrition requirements and minimum level of clothing, footwear and nutrition. This was calculated as Rs. 471.20 per person per month 1985/86 and 1990/91 at 1980-91 Sri Lanka prices and Rs. 717.09 per person per month in 1995/96. Higher Poverty Line denotes minimum consumption necessary to achieve a decent standard of living and includes a small amount of discretionary expenditure over essentials such as food, clothing, housing, transport, communications and health expenses. The higher poverty line was Rs. 565.44 per person per month in 1985/86 and 1990/91 at 1980-91 Sri Lanka prices and Rs. 880.51 per person per month in 1995/96.

Sources: Data for 1985/86 and 1990/91 are from World Bank (1995); data for 1995/96 from Aturupane and Gunewardena (1998). All estimates based on data for the first quarter from the Household Income and Expenditure Surveys of 1985/86, 1990/91 and 1995/96. Estimates exclude the North and the East.

Table 2:

Growth of Output 1986-1991, 1992-1997

	86-91	92-97
Agriculture, Forestry and Fishing	1.4	1.4
Agriculture	1.2	1.3
Tea	2.2	3.7
Rubber	-4.1	1.1
Coconut	-3.5	3.5
Paddy	-0.5	0.3
Mining and Quarrying	6.3	4.7
Manufacturing	6.8	8.9
Services	3.6	5.8
GDP	3.6	5.4

Source: Calculated from data from Central Bank of Sri Lanka.

Table 3:

Poverty in Sri Lanka, by District, 1995/96

	Incidence of Poverty %			
	Lower poverty Line		Higher poverty Line	
	Index	Contribution	Index	Contribution
Colombo	10.33	5.57	18.71	6.47
Gampaha	10.89	5.24	20.91	6.46
Kalutara	25.65	6.55	37.73	6.19
Kandy	29.87	9.12	42.03	8.24
Matale	34.67	3.73	51.04	3.53
N' Elyya	20.86	3.95	39.67	4.82
Galle	24.74	6.16	38.67	6.18
Matara	28.14	5.70	43.73	5.68
Hambantota	27.18	3.75	42.82	3.79
Kurunegala	34.19	12.46	52.81	12.35
Puttalam	33.10	5.20	51.39	5.18
Apura	32.98	5.50	50.03	5.36
Polonnaruwa	27.45	2.23	39.78	2.08
Badulla	29.77	5.33	48.47	5.57
Moneragala	49.11	5.30	66.28	4.59
Ratnapura	38.94	8.90	52.15	8.07
Kegalle	25.41	5.31	40.56	5.44

Notes: Estimates based on consumption needs. Lower Poverty Line denotes minimum expenditure necessary to reach minimum nutrition requirements and minimum level of clothing, footwear and nutrition. This was calculated as Rs. 717.09 per person per month in 1985/86. Higher Poverty Line denotes minimum consumption necessary to achieve a decent standard of living and includes a small amount of discretionary expenditure over essentials such as food, clothing, housing, transport, communications and health expenses. The higher poverty line was Rs. 880.51 per person per month in 1995/96.

Source: Gunewardena (2000). Estimates based on all-island data excluding Districts in the North and East, of all four quarters of the Household Income and Expenditure Survey 1995/96.

However, the fiscal abilities of different regions to supply such services may vary. For example, poorer regions typically have greater concentrations of poor people, and have fewer resources to provide necessary services for their poor. In such cases, the second insight offered by decentralisation theory is that the federal transfer in a fiscally decentralised structure of government can act as an instrument to bring about greater re-distributive justice between rich and poor regions. First, it can ensure a more equitable sharing of resources among jurisdictions and help establish a level playing field through the general-purpose transfer. Second, the specific-purpose transfer (for example, a transfer aimed at providing irrigation facilities for poor farmers), can ensure that they do so (Rao and Das-Gupta 1995:8-9). Moreover, as Bird and Rodriguez (1999:317) point out, the main objective of the inter-jurisdictional equalising transfer is to 'discourage migration [from poor to rich regions] in response to ... fiscal rather than real economic differentials'.

However, it is appropriate to raise three caveats at this point in the discussion. First, how efficient sub-national governments are in providing public services depends not only on the capacities of sub-national units, but also on the extent to which they are accountable and transparent in their activities (Tanzi 1995).

Second, while the general-purpose transfer may take care of inter-jurisdictional equity to a great extent, the specific-purpose transfer is no guarantee that intra- or within-jurisdictional equity will be looked after. Given unequal power relations in rural societies, the local elite is usually well placed to capture decision-making about development projects, frequently working through decentralised structures of government themselves.² The problem is confounded by the quasi-public nature of most public goods and services provided by sub-national governments: access may be denied to others and benefits appropriated by the more powerful. For example, even if a specific-purpose transfer is aimed at increasing irrigation facilities for poor

farmers, the irrigation canal may be sited in such a way that the lands belonging to the village headman and his family are irrigated first.

Third, while inter-jurisdictional equalising transfers may be designed to discourage migration in response to fiscal rather than real economic differentials, fiscal differentials themselves may well reflect real economic differentials. Then a key issue that arises is whether it makes sense to continue transferring resources to poor regions that have few comparative advantages and are likely to lag behind in the economic growth race, anyway. Perhaps the better option may be to encourage the migration of people from such regions, to those with better economic prospects. I return to this theme in Section 3 below.

Finally, what are the implications of fiscal decentralisation for economic growth? The idea that 'development policies that are sensitive to particular regional or local needs for infrastructure and even human capital are likely to be more effective in promoting economic growth than are centrally determined policies' (Oates 1999:1143) has wide appeal. Meanwhile, donors and others have come to regard greater fiscal decentralisation as necessary to provide more demand-driven services that would enhance the capabilities of the poor and help them exit poverty.³ Coupled with the fiscal equalisation possibilities between rich and poor regions of an inter-governmental transfer system in a decentralised framework, the net result is an intuitively appealing set of arguments that sees greater fiscal decentralisation contributing positively towards both the efficiency and equity aspects of economic growth. From this set of propositions to the proposition that fiscal decentralisation is necessary for rural development and regional economic growth, is just one enticing step.

But is there any empirical evidence to support this argument?

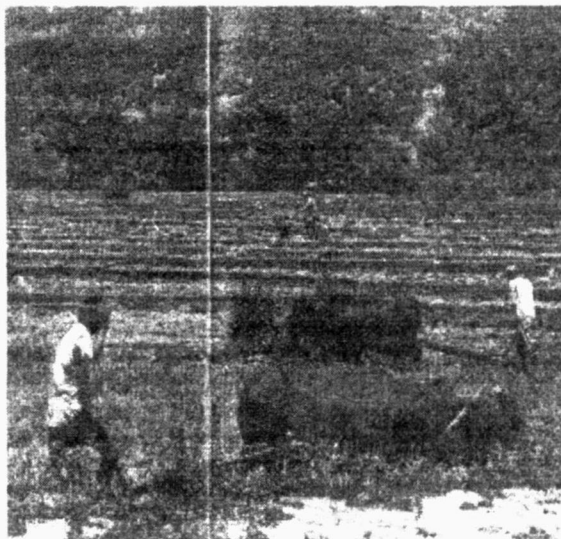
The short answer is that while there is no formal theory of fiscal decentralisation and economic growth, the empirical literature has yet to yield any firm conclusions on the relationship between the two variables. Admittedly, Huther and Shah's (1996) study of decentralisation and economic growth in eighty nations found a statistically significant and positive correlation between increased decentralisation and improved economic and political performance. But correlations between variables do not prove causation, and Davoodi and Zou (1998) in their study of forty-six countries found a negative relationship between the two. In contrast, Bahl and Linn (1992) argue that the gains from fiscal decentralisation emerge as economies grow and mature.

Given that the causal relationship between fiscal decentralisation and economic growth is still at the hypothetical stage, I am emboldened to advance an alternative set of hypotheses in this paper. Hence, in the next section I draw on the New Economic Geography literature on industrial location and question whether objectives such as rural development, regional economic growth and rural poverty reduction can be achieved, with or without fiscal decentralisation, when the macroeconomic policy framework favours greater integration with the world market.

Rural Development Policies in a Liberalised Macro-Economy

Sri Lankan policy-makers have habitually been pre-occupied with issues of rural poverty and rural development. There are several reasons for this. First, the prospect of a rural economy founded on rice farming has traditionally had an emotive significance for the Sri Lankan polity, based as it were on the idealisation of the rural sector as the repository of an indigenous culture that had remained uncorrupted by four centuries of foreign rule. Secondly, Sri Lanka's ancient civilisation in the dry zone had been founded on a technologically advanced hydraulic system. Hence, land settlement schemes centred on irrigation works were regarded as the best way to restore the country's past prosperity (Moore 1985; Peiris 1996). But at the same time, the grant of universal franchise as early as in 1931, the first-past-the-post electoral system that prevailed in practical terms until 1988, and the demarcation and delimitation of electorates in favour of the rural voter in the hinterland, also forced the Sri Lankan State to be highly responsive to issues of rural poverty, inequality and welfare. This policy emphasis has survived the liberalisation of the economy and the shift to a growth-oriented approach since 1977.

However, while the political imperatives for wide-ranging rural development policies remain as strong as ever, bolstered by the patron-client links that form the basis of electoral allegiance in Sri Lanka (Jayanthi 1992), their economic rationale is less clear. In fact, in this section I argue that there are fundamental contradictions between policies to develop rural areas based on equity considerations on the one hand, and policies to generate economic growth through closer integration with the world market, on the other. For, whether overtly expressed or not, this has been Sri Lanka's development strategy, and I suggest that it may have actually helped (a) reinforce urban-rural differentials; (b) perpetuate a dualistic economic structure; (c) encourage low productivity in rural areas; and, (c) transform the rural economy into a remittance and transfer economy. Admittedly, the empirical evidence is yet to be gathered, but I hope that the discussion to follow will trigger some informed policy debate about these issues.



Consider a simple model with an urban sector and a rural sector. The urban sector has a pre-existing concentration of industries due to some inherent (static) comparative advantages in factor endowments such as airports and seaports, electricity and telecommunications. The rural sector is involved in agricultural production. Also assume that there are significant transport costs between the two sectors, increasing returns to scale and inter-industry linkages. Now introduce policies that favour equitable access to public services, rural infrastructure development programmes, and restrictions on the use and transfer of agricultural land on the one hand, and on the other, macroeconomic policies that favour industrialisation and export-oriented growth. What may be the impact of such policies on the two sectors?

If the rural development priorities and policies are anything like those implemented in Sri Lanka over the last five decades, one can expect rural access roads to be prioritised over roads linking rural regions with the metropolis,⁴ and transport costs between urban and rural sectors may be high. Agricultural policies may favour rural smallholders and impose restrictions on the use and transfer of cultivable land.⁵ Public expenditure on housing construction may favour rural areas over urban areas, while policies relating to electricity, health care and education provision may try to ensure that everybody has access to a basic service despite the high marginal costs (due to lower population density in rural areas) of providing a geographically wide network of services.

Introduce to this scenario, macroeconomic liberalisation policies designed to induce export-oriented industrial growth. This would encourage the concentration of new economic activities such as export industries in the urban centre because of its initial comparative advantages. Thereafter, as the New Economic Geography literature suggests, the further clustering of industries and populations will take place because of (centripetal) agglomeration forces affecting firm location.⁶ That is, when there are significant transport costs, increasing returns to scale and inter-industry linkages, producers are encouraged to locate close to their input suppliers or to their customers, and locate close to each other. And

first-mover advantages may be crucial where agglomeration forces are strong because 'people follow jobs and jobs follow people' (Muth 1971), so industry clusters attract people and population clusters attract industries, stimulating further agglomeration. Thus, with the exception of materials-oriented industries such as agro-processing that have a definite comparative advantage in locating in rural areas, rural locations become less attractive for most types of industries, and certainly for the kind of non-agro-based export industries that Sri Lanka specialises in. For example, tea-processing industries will locate near tea plantations and desiccated coconut mills will locate near coconut plantations and will probably create their own urban nodes, but manufacturing-based industry will tend to locate near the metropolitan hub. And this may be why in Sri Lanka, 56 per cent of all industries in 1999 were located Colombo District, and 19 per cent and 4 per cent in Gampaha and Kalutara respectively (Table 4).

However, the rate of agglomeration will slow down, other factors being equal, if dispersal (centrifugal) forces set in. That is, the concentration of firms will raise the demand for factors of production, raising their prices (for example wages and rents), and so the production costs of firms, and firms will be encouraged to disperse from the urban centre. But if the supply of factors is elastic due to greater spatial mobility of factors, then the rise in factor prices may be dampened. For example, if labour is able to move to the urban sector from labour abundant rural areas at little cost, then wages would rise more slowly and dispersal forces would be weaker. High rents would encourage firms to disperse from the urban centre but if transport costs between urban and rural areas continue to be high, agglomeration forces may tip the balance. That is, some firms may move only a relatively short distance away from the urban centre so that the fall in rent costs more than compensates for the increase in transport costs. This may encourage the urbanisation of adjacent rural areas and the development of suburbs around the metropolitan hub. This may explain the regional distribution of industrial enterprises in Sri Lanka. For example, as Table 4 shows, while the rate of industrial concentration in Colombo District decreased marginally from 61 per cent of all industries to 56 per cent of all industries between 1994 and 1999, 69 per cent of all new industries that were established during the period located in Western Province and mainly in Co-

lombo and Gampaha Districts.

What may happen to rural-urban differentials when the two sets of policies operate side by side? First, urban wages⁷ would rise as the concentration of industry tightens the urban labour market, but the pace at which labour moves from rural areas to dampen the rise may be slowed by push and pull factors that would tend to keep the majority of people in rural regions. On the one hand, inadequate urban housing, congestion and high rents would discourage people from moving to urban areas. On the other hand, rigidities in the rural land market may make it difficult for them to sell up and move out. At the same time, many rural people may not have the necessary skills and attitudes necessary for urban sector jobs. So people may settle for an intermediate arrangement, whereby one member of a rural household may move to the city for employment, leaving the rest of the family in the home village. This may lead to high rates of absenteeism and low productivity among urban sector workers as they commute to their home villages to visit their families at weekends and off-days and are tempted to stay back an extra day or two.

But in the rural sector, the natural increase in population will cause the average farm size to dwindle, depress productivity in the peasant sector, and lead to greater rural underemployment. As the size of agricultural plots decrease (roughly 67 per cent of holdings in Sri Lanka are less than 2 hectares in extent), rural farmers would become more risk averse, relying more heavily on low risk, low return crops such as paddy. Many rural households will become more dependent on transfers and remittances from family members working in urban areas or abroad. Meanwhile, new rural families would encroach on state lands and forest reserves, subsist by cultivating chena crops, and form a constituency that would demand more of the same rural development policies, namely, regularisation of title, rural access roads, electricity, healthcare and education.

High transport costs between the rural and urban sectors would further exacerbate dualism because rural agricultural product markets will be segmented from the urban consumer market. Food prices in the urban sector will be high, perhaps triggering wage price spirals, but farmers would get only a fraction of the consumer price. The substantial differential between producer prices and consumer prices would denote not only transport and wastage costs but also the substantial margin of middlemen acting as monopsonistic buyers in segmented markets. Even so, despite higher real wages in rural areas, firms may yet be reluctant to move to there because of high transport costs and lower quality infrastructure services. Instead, dispersal forces may see an unhealthy pattern of urban development along arterial roads, particularly near the metropolitan hub, and investors may decide to locate in more favourable foreign locations.

Table 4:

Regional Distribution of Industrial Enterprises (1994-99)

Region	Number of Industries		% Share of Total		% Share of Total Increase
	1994	1999	1994	1999	1994-99
Western	2060	2701	83.6	79.5	68.8
Colombo	1514	1893	61.4	55.7	40.8
Gampaha	465	659	18.8	19.4	20.9
Kalutara	81	149	3.28	4.4	7.3
Central	90	155	3.7	4.6	7.0
Southern	118	186	4.8	5.5	7.3
North Western	91	183	3.7	5.4	9.9
North Central	27	37	1.1	1.1	1.1
Uva	31	44	1.3	1.3	1.4
Sabaragamuwa	36	63	1.5	1.9	2.9
Eastern	12	23	0.5	0.7	1.2
Northern	n.a.	5	0.0	0.1	n.a.
TOTAL	2465	3397	100.0	100.0	100.0

Notes: Figures denote industries registered under Ministry of Industrial Development, under BOI (including the 200 Garment Factory Programme) and those of the 50 Garment Factory Programme.

Source: Calculated from data from Central Bank of Sri Lanka Annual Reports, various years.

The model described above may be a plausible explanation of how agglomeration forces unleashed by economic liberalisation policies alongside equity-oriented rural development policies may have reinforced urban-rural differentials in Sri Lanka, perpetuated dualism, encouraged low agricultural productivity and helped transform the rural economy into a remittance and transfer economy.⁸ Note that this may happen even if the overall policy framework does not contain an overt urban bias, and may in fact be tilted favourably towards the rural sector.

Admittedly, the model still needs to be tested through rigorous analysis, but a few preliminary observations merit consideration.

First, while rural development policies aim to prevent rural-urban migration, the paradigm is firmly rooted in the static theory of comparative advantage. For example, rural industrialisation policies aim to redress the balance of infrastructure and facilities between rural and urban areas. But given the dynamic forces of industrial agglomeration and first-mover advantages, such efforts seem doomed to failure if rural areas cannot offer firms a cost advantage that would encourage dispersal forces, particularly when transport costs between the two sectors remain high.

So would reducing transport costs between the urban and rural sectors remove the urban bias of industrial location and encourage the development of rural areas? Not necessarily, because better transport cuts transport costs both to and from rural areas: rural areas can now be supplied more cheaply by firms located in urban centres that can also enjoy the advantages of being in a cluster. Reductions in transport costs can favour rural development only where transport costs of agricultural goods fall more slowly than for industrial goods (produced in urban areas); where a higher real/lower nominal rural wage can compensate for the lack of agglomeration economies in rural locations;⁹ and where rural production of goods or services can be qualitatively differentiated according to their origin of production (Kilkenny 1998a). Thus, processing industries that have materials cost advantages in locating in rural areas such as desiccated coconut mills or the ceramic industry, or service industry such as trade or tourism based on location advantages of some rural areas (for example, Dambulla, Sigiriya, and Kataragama), will continue to thrive and create their own urban nodes. At the same time, the significant reduction in transport costs of the information technology industry may encourage its location in certain rural locations but only so long as there are sufficient concentrations of skilled workers and high quality provision of infrastructure services such as telecommunications and electricity (both of which are hard to come by in rural Sri Lanka). But even these will tend to grow in urban clusters though independently from the metropolitan hub.

Even so, while rural development policies may ameliorate living conditions in rural areas, the majority of rural people may need to move out of rural areas and become increasingly urbanised if rural poverty is to be reduced in a sustained manner. Then the pressure on the land is likely to ease and consolidation of land-holdings will make agriculture more viable for those who remain. Recall that no country in the world has succeeded in reducing poverty by keeping the majority of its population on the land and engaged in the primary sectors of the economy. Therefore, a policy framework geared at reducing poverty should encourage planned urbanisation and encourage the migration of labour from rural areas to urban areas. If the metropolitan hub is congested and dispersal forces are setting in, then policy makers should promote intermediate urban centres close enough to the metropolitan hub to permit some degree of dispersal without losing the advantages of clustering.¹⁰ Admittedly, the socio-cultural costs large numbers of rural people relocating to urban areas may be considerable. But given that higher rates of urbanisation will be the inevitable result of Sri Lanka becoming more integrated with the global market, it may be better if policy-makers recognise this and prepare and implement policies and programmes to minimise the costs and ease the transition.

What may be the role of fiscal decentralisation in such a scenario? Recall that two key objectives of fiscal decentralisation and inter-jurisdictional equalising transfers are to bring about greater inter-regional equity and discourage migration in response to fiscal differentials. But while first-mover advantages and agglomeration forces favour metropolitan regions, most other rural regions will never catch up. Therefore it makes little sense to discourage people from moving from such areas to those that have better economic prospects. In fact, the more appropriate policy response may be to facilitate such migration, as argued above. The impact of agglomeration forces should also make clear why no rural development policy framework has been entirely successful in preventing rural-urban migration. Bird and Rodriguez (1999:317) cite the classic case of Mezzogiorno in Southern Italy where 'the major beneficial effect of increasing public spending in poor regions was... to make it easier for those who wanted to do so to leave, both by upgrading the human capital they carried with them and by improving the transportation systems.'

If the rural development paradigm as currently conceived is fundamentally flawed, then it is unlikely that fiscal decentralisation will make it any more effective in reducing rural poverty. Rather, policy makers need to define the role of fiscal decentralisation in a policy framework that is in tune with the forces of urban agglomeration and global integration. Else fiscal decentralisation, like rural development policies, will work against the inevitability of greater market integration, thereby making the eventual adjustment process far longer and more painful.

Conclusions

As Sri Lanka pursues greater fiscal decentralisation measures as a solution to its current conflict, the political objectives of fiscal decentralisation have tended to dominate the policy debate. But at the same time, many observers expect fiscal decentralisation policies to deliver development objectives such as rural development and economic growth, greater inter-regional equity, and rural poverty reduction that centralised government structures have failed to achieve. This paper argues that greater fiscal decentralisation may be no more effective in achieving these development objectives as policies followed thus far. Rural development policies, with or without greater fiscal decentralisation, can reduce rural poverty and urban-rural differentials only marginally, when implemented alongside macroeconomic policies that favour the dynamic forces of urban agglomeration. The analysis suggests that contrary to conventional wisdom, rural poverty reduction may actually need policies that favour planned urbanisation in line with centripetal forces, and higher rates of rural-urban migration that ease the pressure on agricultural holdings, making them more viable for those who remain in rural areas. The parameters and objectives of the current fiscal decentralisation exercise need to be modified accordingly.

Lower quality infrastructure in rural areas may come about due to increasing resources being spent on ensuring access even at high marginal costs of service provision, leaving little surplus to upgrade its quality. For example, many rural households will have electricity connections, but breakdowns will be frequent as the Electricity Board finds it difficult to maintain the vast network of power lines. Similar forces may adversely affect the quality of health and education services in rural areas. Thus, the poor may need only to travel a short distance to the nearest health centre, but as maintaining the basic infrastructure would swallow most of the budget, there would be little money left over to buy drugs or up-grade medical equipment. Secondary school enrolment rates may be more than 70 per cent, but only 20 per cent of children would pass the GCE Ordinary Level Examination as funds for buying teaching equipment would be scarce. Poverty alleviation strategies that try to encourage the development of micro-enterprises in rural areas may actually spawn only survival strategies as rural producers are unable to access larger, higher-income markets due to high transport costs (Gunatilaka and Williams 1999).