

**THE DEVELOPMENT CENTRIFUGE**  
*A Retrospect in Search of a Theory and a Centre*

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**Abstract:**

*This paper argues that the present discourse on development has been playing down the relevance of central plans and development economics. It intends to show that what is important is finding the right combination of planning at the central and the distant levels, which can be shown to exist formally, in respect of development activities. We have first argued that because of the presence of power asymmetries, deliberate decentralisation of development till the current endeavour, often remained ineffective. This factor rendered the present international approach, mainly through the leadership of the World Bank, superficial and somewhat centralised from outside, eventually connected in a manner to the power asymmetries prevailing in the present world economy. We have traversed through the experiences and the problems of collective choice as explored in the concept of decentralised development to derive the insight that delivery of development involves both publicness and privateness embodied in the associated goods, activities and services. Taking this as a point of departure, in the next step we have tried to highlight our construction of a theoretical model, to show that working out an optimal combination of central and decentralised planning is possible. The idea of dismantling of central planning in favour of market-based decentralisation is inappropriate for the purpose of development in the world economy.*

**1. Introduction**

Widespread advocacy for decentralisation of development programmes through local governments characterises the development designs of most of the poor countries today<sup>1</sup>. This approach is also known as the Comprehensive Development

Paradigm. Failures of centrally planned economies, even to sustain themselves during the last two decades or so, had compelled them to introduce programmes of transitions to market orientation extensively. Reports of pervasive decentralisation processes in the poor countries of Asia, Africa, and Latin America are available on the website of the World Bank. Though a debate is ongoing, support to the emergence of an approach hinging crucially on participatory decentralisation of development is extensive<sup>2</sup>. The present paper tries to argue that an apparent and superimposed decentralisation, - currently widespread in the world - has still remained broadly 'top down', alienated 'decentralisation from above', lacking a functioning dynamics and rendering it to be self-defeating. It also argues that an optimal multi-level mix is likely to exist with better outcome in people's well being.

Doubts emanate from certain temporal characteristics of the global economy discussed below. Although a globalisation is unfolding, some suggest that markets may now be made profitably active in distant regions of countries by injecting some purchasing power and employment, no effective and sustained development is likely to ensue simply by doling out small quanta of certain social sector facilities. The advocates of such decentralisation ignore the fact that programmes must set sufficiently powerful forces at work to break the inertial frames embodied in the relations of the political economy of underdevelopment, both global and local, in the relevant regions. Fragmented, incomplete and retrogressively interlinked markets constitute the centre of this inertia<sup>3</sup>. A major breakthrough cannot be accomplished by decentralisation from above<sup>4</sup>. A coordinating supervisory, and supportive centre becomes a necessary instrument for overseeing infrastructure and implementation of decentralisation.

The requirements of an intricately worked out case-specific design of decentralisation, of combination of scale and scope, and the need for unleashing market-economy forces in remote

rural areas have repeatedly been emphasised in recent times. Also, the experiences of many countries including India, show that despite all out efforts from the World Bank, the process has not spread fast and uniformly in the third world. Yet, wherever some signs of progress showed up, two features seem to be common: one, the inertial frames are broken by people's involvement, strengthened by support from the government (Kerala, West Bengal, China)<sup>5</sup>; and two, a monitoring-coordinating role was performed by the government.

The need for a central monitoring presence emerges because the deliveries associate both *public good and private good features* in the performances. As Joseph Stiglitz remarked, the delivery of well being itself is a public good. As a result, free riding possibility, and likelihood of alienation of the masses from the achievements always remain in the ways the programmes are conceived, designed and implemented. The kernel of government failure and coordination failure remains embedded in the processes in general, in the absence of external regulation. Moreover, the powerful capture most of the benefits in a situation of power asymmetry.

The need for such a combination of coordination and decentralisation in the context of fiscal decentralisation was pointed out by Prud'homme (1995), which McLure Jr. (1995) criticised as conventional wisdom. The discussion concerned the sphere of development programmes, but perhaps confused it with a case for a mixed economy. Marjit (1999) considered a public-private combination for fiscal balance at the local government's level. Here, in our view, an Olson paradox has to be resolved, an issue we discuss later.

Hence the factors active in the experiences, and the feasibility of an equilibrium that integrates the two levels of planning need to be explored. Section 2 first analyses the present world scenario as the context. Section 3 discusses the available literature relating to the relationship between democracy, development and

decentralisation, to highlight the role of possible rigidities and trace out the need for a combinatorial approach. In Section 4 we depict the decentralised implementation mechanism in its relation to all the levels of planning. Section 5 sketches out a formal model showing the optimality of such a combination. The concluding remarks and the policy implications are briefly presented in the final section.

## **2. The Recent Drive in the Global Economy**

What Stiglitz said on Russia and other transitional economies essentially applies to most of the developing countries experiencing some kind of the newly initiated decentralisation drive (Stiglitz (1999)). Stiglitz's observation is as follows: while the inadequate and narrowly economic approach in the former type of central planning by necessity was marked by informationally inefficient distorted prices, attenuated incentives, and produced output well below the economy's potential, 'reforms' – privatisation, free market prices, decentralisation – would move the economy closer to its potential. But because of the lack of organisational capital, far more is needed to induce unhindered participation. The need for thorough and free participation has been emphasised by Sen (2002) also. We will see that this requires an interactive combination of the two levels of planning.

### **2.1 Some Recent Factors**

Certain interesting historical concomitances resulted in the present emergence of a pressure for decentralisation. The rampant financial instabilities in both rich and poor countries, long drawn recessions in the profit-driven world, breakdown of the socialist world ending the balance that was, resulted in quite a few contingencies for the countries at the receiving end which the emerging new world order wanted to settle and utilise.

The spread of decentralisation, the resumed emphasis on and the intended inclusion of the donors somewhere in the

process are not independent phenomena. There were some intertemporal co-emergences. The weakness of the socialist bloc, debt and balance of payment crises of the LDCs, and continued recession and balance of payment deficit along with shattering, periodical stock-market shock-waves in the West with intense competition for market within intracapitalist block of developed countries [please refer to 'Voluntary Export Restrictions' in the 1990's], the threat of resource and energy supply associating itself with anticipated environmental 'tragedy of the commons', all were moving together. As things reached a peak, close to 1990's, the collapsing sides had to accept quite a few dictates from the salvage group – some in the form of IMF conditionality and World Bank prescriptions, others in the form of WTO requirements and other international sustainability follow-ups of Earth Summit protocols in tandem with UNEP. Their close contemporaneity should not be taken as accidental.

The renewed pressure towards decentralised development procedures is not free of this path. I only refer to the fact, as an endorsement, that while promotion of PRI's and village reconstruction had resurfaced in Indian subcontinent, since the 1950's, the recent spread resulted from 73<sup>rd</sup> and 74<sup>th</sup> Amendment of the Constitution in 1993 in India. Around the same time it spread all over the recognised less development.

The reason appears to lie in the plight of the market-driven economies that came with all this. The industrially advanced world, that is, the profit-driven capitalist group of countries has been worried about the developing ones on two counts in recent times. First, their macroeconomic instability and emergent insolvency was threatening to the former as potentially a massive unavoidable loss, if not helped out. The second is their related weakness to become new sources of markets. This second factor is crucial for all profit-interested countries as their entire pursuit is retainable only with continuous increase in new market shares; and there is intensive and fierce competition among them in this

area. One should note that technological progress was considered to be the primary motif force in capitalist development which under detailed investigation turned out to be endogenous and depended increasingly on the expansion of market. As recessions set in so did lull in innovations. Hence the need for actions to support continuous innovations became emergent<sup>6</sup>. *Innovations encompassed institutional structure also, of which the new decentralisation approach is a form.*

## **2.2 Capital in Self-Salvage Imperative**

Thus to ensure future retrieval of loans already advanced (even advanced aids) these countries, not only the LDCs but erstwhile socialists also, seriously needed financial support. Unless they are bailed out of the present fiasco, the returns from past investment made and future potentialities are lost forever. Besides, it would be less costly to build up the potential market from the existing base structure, rather than from dismantling it altogether.

Now, this support implied sizeable movement of international savings to the poor countries and the donor countries could not disregard the opportunity cost, that is, the potential alternative sacrificed, as a result of this transfer. To preempt further possibilities of insolvency, organisational arrangements, from their point of view, would be necessary to ensure the return from the savings<sup>7</sup>. To achieve some transparency of the trajectory, this method of penetration to the micro units of the economy appeared highly reassuring.

Thus the process of decentralisation presently active in the major part of third world countries has resulted from a new global scenario. The world is initialised to a start off for breaking new grounds in search of expanding markets and profits.

However, this apparently vast change in the political - economic character of the world economic society has not been able to change much the social and political reality of the villages of the third world where some *de facto* feudal structure still

prevails. Growth rates of most of the developing countries experiencing decentralisation exposures have not been too impressive while the progress in the fronts of poverty reduction, employment generation, distributive justice has remained painfully slow, along with widespread resonance in terms of sterility of decentralisation programmes in respect of any appreciable take-off<sup>8</sup>. A bias in favour of the related power structure (some synergy of the unipolar global and semifeudal-semicapitalist local pressure groups) that intends to appropriate all benefits becomes reinstated, because the interlinkages among various segmented and incomplete markets – land, credit and labour – survived<sup>9</sup>. This retains the strong organisational bottlenecks hindering the free unfolding of a steady development process in which ‘rationality assumption’ might fit in. Thus welfare maximisation of all in this situation, as envisaged by the neoclassical vision of economic development, remains a mirage everywhere.

Thus decentralisation from outside will not be able to produce new results. We will be perennially in need of the presence of a multilevel planning that optimally combines decentralisation with central planning capable of the necessary breakthroughs. We address this aspect rigorously in Section 4<sup>10</sup>.

## **2.3 Some levels under focus and the new demand impetus**

The relevance of the size-of-market angle in search of new investment opportunities (note 9) can be identified in ideal cases of different interrelated strands on which decentralisation designs are being reconsidered<sup>11</sup>. We take them briefly here:

Strand-1. Fiscal decentralisation:

(i) Activities in this front intend to ensure stabilisation from the constituent parts of the economy;

(ii) local financing of most of the programmes of local delivery of ‘entitlements’, at least partially with accountability and efficiency of expenditures.

These will imply infusion of some local incentives to spend and some effective demand generated locally.

Strand-2 Development Decentralisation:

(i) Activities to create rural infrastructure and social sector activities inject some demand (sanitation or clean water programmes would increase productivity, nutrition needs and demand);

(ii) constructing rural roads somewhat integrate rural demand with outer market circuits;

(iii) exposure to globalised consumption concepts through community centres.

Strand-3 Institutional Decentralisation:

(i) Introducing clearer rules, rights and responsibilities;

(ii) addressing local incapacities (one result of land reforms is to recognise smallholders' right to sell land to earn some purchasing power which in turn may lead to new consolidation of land to be directed to new demand base);

(iii) participation implies exposure and awareness generation on consumable goods and services and creating a stronger 'network effect' of social capital.

Strand-4 Environmental Decentralisation:

(i) The resource base of the world lying largely in the third world and out of the legal control of the rich countries is being brought under uniform and integrated programmes;

(ii) an outlet for injecting resource-tied funds;

(iii) intervening in the environmental pull on the interest rate, which is likely to have effects on overall flow and survival of capital.

All the four clearly have a convergence in that they all will

be working to increase the size of the markets, create new investment demand and introduce new technology in consonance with the new world order. Also, all of them converge to a further point – a combination of public and private good nature of the outcomes.

It will be useful to relate to another institutional association in recent history. It is around the same time that the role of so-called 'social capital' has been discovered and has figured in, in the discourse on development academics<sup>12</sup>. By this, along with the importance of natural, physical and human capital in engendering development, the role of social networking and transmission of information has been emphasized as a significant concomitant. In development local information is extremely valuable and so decentralisation and social capital seem mutually reinforcing bases of development and demand creation. Now, the interlinkage and incompleteness of markets have remained adverse forces at work as they inhibit free interaction among people in the villages and efficient distribution pattern. This implies that the recognition of social capital, political factors and the needed purchasing power-generation cannot be sustained amidst the stubborn rigidities that may make the entire campaign self-defeating<sup>13</sup>. The problem has to be understood in this broader context.

### **3. Democracy, Development Economics and Decentralisation: The Literature**

The importance of democracy in engendering economic development lies in its promotion of individual freedom, supported by a collective will of the majority. The underlying assumption is that at all levels of decisions and their executions, the majority is correct because, as reason presumably prevails through free exchange of ideas and propositions, the best will be freely reached to be the actual choice. However, there may be some gaps. Let us consider the components separately for a clear understanding.

### 3.1 Democracy in Decentralisation of Development

In a perfect democracy, only better choices than the existing ones win this majority support based on the individual's ability of influencing a change in collective choice, individual choices apart. And in effective democracy, corresponds of such improvements permeate from top to bottom, and as a result the processes are always bottom-up and top-down together. If the nation democratically decides, let there be decentralised development the micro level villages accept. Then the micro-level decides, let there be improvements of village commons (suppose), the nation accepts and to this end distributes the aggregate surplus generated from the micro levels<sup>14</sup>.

Democracy means *implicit laissez faire* in this sense. The existence of uninterfered complete markets ensures promotion of the best through price votes of the majority, comprising symmetrically insignificant individuals if isolated. They opt for the least cost-best return choices which lead to the best economic outcome. Democracy enables everybody to voice his/her own option. And under ideal conditions the collective search for the least trouble-maximum benefit choices, makes possible the best socio-political as well as the best economic outcome in terms of capability-freedom accessibility (Sen, (2000)). It follows that the system needs to respect all the local identities and their decisions.

As a World Bank Policy Research Working Paper (1994) pointed out, one of the major longstanding issues in the study of economic development is concerned with the question, to what extent democratisation helps alleviating poverty by serving the interests of the poor. If the majority is poor, it has been argued, on the one hand increased democracy promotes the welfare of the poor by improving flows of information between majority of the citizens and by increasing the accountability of policymakers to poor and low-status individuals. This can be supported if democracy truly upholds the interests of the actual majority. Conversely, it has been suggested that democratisation

may adversely affect the welfare of the poor by increasing rent-seeking behavior and distributing decision-making among relatively uninformed individuals, thereby shifting public resources from those with fewer private resources, in a situation where the power inertia prevails (Bardhan and Mookherjee, 2000). There is a clear need, therefore, for empirical work to evaluate the effects of democratisation on the allocation of local public goods<sup>15</sup>.

India provides an especially interesting case where one can examine how local democratisation and fiscal decentralisation affect the interests of the poor and economic performance significantly. Although there has been substantial national legislation for local democracy since the early 1950s, implementation has been largely left to individual states, yielding variations in both the extent and timing of the transition to local democracy in villages, in many of which adverse relations of power exist. First, the large majority of the rural poor are landless. Second, landownership mobility is quite limited, so that classification by land ownership is lifetime welfare. Third, and most importantly, the two classes have distinctly different interests because landless households are net sellers of labour while landed households are typically net buyers of labour. These two types of households will have substantially different views about the merits of public goods, which serve primarily to raise the local wage (World Bank, 2000). Then, if decentralised programmes inject some demand without disturbing the conflicting interests and bias resulting, no process of raising majority welfare can be fruitful.

On the other hand, China not under democracy, could successfully get over these hindrances mainly through its central counteraction on such retrograde forces and then inventing ways to decentralise under its political framework, which is capable of harnessing the local information and comparative advantages.

Thus it depends on how forces of development economics interact with the process of democratic decentralisation.

### **3.2** *Development Economics and Decentralisation*

In recent years development economics has undergone significant changes in its methods and approaches to the problem. Frustrating practical experiences led to disillusionment with an exaggerated emphasis on economics-only approach and incorporated institutional and socio-political dimensions into the studies. The idea behind the change is that economic performance depends crucially on organisational characteristics, which in turn depend on both economic and socio-political parameters<sup>16</sup>. Since the performance within such a system can best work out in an environment of freedom of expression and resulting dissemination of information and knowledge, both local and global, the emphasis on democracy as an instrument of efficient social networking emerged. In this process the role of governance, management in development, and hence among other things, organised participation of people and social capital as means of governance figure in. This is difficult especially in view of the rigidities that have repeatedly come up<sup>17</sup>. The requirement of intensive utilisation of all information and knowledge on the one hand, and quest for profit (as that has been threatened time and again, with haltering effective demand) in all possible corners on the other, have brought about this widespread and resounding call for decentralisation in our time.

There has been a practice to identify underdevelopment by the absence of features that characterise developed economies<sup>18</sup>. The list is quite long<sup>19</sup>. We mention only a few here: absence of high GDP per capita, absence of satisfactory rate of employment growth, satisfactory rate of poverty reduction, absence of transparent property rights and employment relations in agriculture and in many petty industries in the urban areas labeled as informal sector<sup>20</sup>. These new characteristics emphasize the need to take account of incompleteness and nonexistence of certain markets, which often account for the slow or sluggish nature of changes<sup>21</sup>. According to many, these features follow

from organisational imperfections, which in turn resulted from institutional backwardness, where decentralisation serves both as a means and as an end.

In some significant quarters it occurred that to break the inertial frames, incentive structures have to be changed. Reaching directly to all nodes of decision-making, including those at the lower levels of governance and community would be the right way to address the issue. Proposals from various spheres to decentralise were floated<sup>22</sup>. For all of them this potentially was a better option in terms of newly probable payoffs. For example, the small and marginal farmers would have better roads and village pond, to avail lower costs; the emigrant may find means to stay back; bigger decision makers such as rich peasants would have some power to handle more of the new resources to be made available through the programmes (Streeten, 1995). Hence the debate on decentralisation as a means to development actually centers on the outcome of these ensuing bargains, incentives and payoffs.

### **3.3** *Decentralisation: the Process, Mechanisms and Experiences*

The word decentralisation implies “the transference of authority, legislative, economic, judicial or administrative from a higher level of government to lower levels”. It basically seeks to create and spread greater energy, a higher sense of responsibility and better morale among agents. The basic idea of decentralisation is sharing the power of the decision-making authority with lower levels in the organisation.

As noted by the World Bank (1989), decentralisation covers a wide range of concepts keeping the core to be transfer of authority from central to subordinate or peripheral levels of government institutions. The Bank differentiated decentralisation in four categories stated below. Each has a significant difference with the other though they are integrally connected. These four types can appear in different forms and combinations across

countries, within countries and even within sectors. Yet they all are weak without a socially strong democracy, as we narrate below.

Political decentralisation implies provision of the citizens and their elected representatives in public decision making while formulating and implementing policies related to micro level. Administrative decentralisation involves redistribution of authority and financial resources for providing public services among different levels of governments. It includes responsibility of planning, managing and financing the local level government or semi autonomous public bodies or corporations through **deconcentration**, that is, the transfer of managerial responsibility for specifically defined functions to public organisations (e.g. local governments) outside the normal bureaucratic structure of central government; and **devolution**, that is, transfer of responsibility for governing to the local masses. This can be construed as the creation and strengthening, financially or legally, of sub-national units of governments, whose activities are substantially outside the direct control of central government (Hicks (1961) and Rondinelli (1984)). The fiscal variety relates to tax imposition and utilisation of the tax revenue at local government level. The fourth category refers to the atomistic decision nodes of a nearly infinite number of purely market-dependent economic agents. Now, it is not possible for the detached bureaucrats, or sub-national government agencies to figure out the true supportable deliveries unless adequately debated at all possible levels where people can be involved. This is possible only through a process of free democratic participation. It is only then that a meaningful coordination of decentralised units within a centrally organised system of decision-making is possible. Here lies the crux of a necessary combination of different levels of planning.

Economics of decentralisation starts with the basic question of attaining allocative efficiency in the face of heterogeneous

local preferences for local public goods. While a fully centralised system suffers from informational problems, a market-based system with some degree of decentralisation in reality has been less equitable in distribution of public goods. A decentralised system with some degree of centralisation optimises the trade off between equality and efficiency (Tiebout, 1956). In the Tiebout model, inter- governmental competition across local jurisdictions over mobile residents, ensures efficient supply of goods. However, the assumptions of this model are considered too stringent for a poor country (Bardhan, (1996)). Besides, the 'voting by feet' logic does not apply to the move for decentralisation in these countries. The logic assumed some flexible usability of people who could reject a badly doing region and move over to a better one. This implies the existence of a labour-scarce society where such mobility is supported by the widespread excess demand for human resources. And hence, there will be incentives all around to keep one region highly attractive and so perform better. In the LDCs, as labour is in excess supply, Tiebout logic would often induce regions to remain bad. Thus left to themselves, the local jurisdictions would not create mechanisms toward the better. However, had people in regions been endowed with resources and allowed to take all decisions that concern their feasible choice set, they would choose the best. In that case the sluggish nature of progress in this front so far, underlines the importance of the centre as Tiebout logic loses its relevance.

Equity and distributional concerns about decentralisation have both positive and negative implications. In some circumstances local governments achieve the twin goal of equity and distributional efficiency more effectively than central governments (Pauly (1973), Litvack, Ahmad and Bird (1998)) stressed that the impact of decentralisation on interregional and interpersonal equity can vary, depending on institutional arrangements and policy design. Only fiscal decentralisation



without financial devolution will enhance disparity in a specific region. Similarly, if states do not redistribute within their jurisdiction, poor people may lack access to public services.

In principle, decentralisation may promote local economic activity through several means, including an increased infusion of capital and other resources, a more extensive provision of infrastructure, and a more effective 'enabling environment' than would have been the case under a centralised system. Indeed, the general agreement in much of the literature on decentralisation appears to be that decentralisation promotes economic development (Olowu, (1987)). But detailed scrutiny reveals a negative role of rigid asymmetries. According to Tocqueville, in his criticisms of the nineteenth century European administrative system, the necessary creativity and popular enthusiasm to sustain the development process might be lacking in the absence of effective basic local government systems (Tocqueville, *Democracy in America*, cited in Olowu, (1987)). Some autocratic leaders in Asian and African countries used decentralisation as a substitute for democratisation at the national level, as a safe way to acquire much needed legitimacy and grassroots support (Crook & Manor, (1998)). The literature thus suggests that development comprises deliveries having both publicness and privateness embodied in them.

Sen (2002) distinguishing between local democracy and decentralisation, commented that, though there is an urgent need of decentralised governance in LDCs especially to manage local public services, and call for responsiveness to local conditions is vital, decentralisation sometimes enhances the concentration of power, and discourages rather than foster participation among the underprivileged in a situation of sharp local inequalities. This in our opinion is better addressed by advice based on a grand plan that makes consistent use of both

local and global information, which requires a central presence in the stage.

A vast literature is available on the experiences all over the world. Tsai (1990) for Taiwan; Maro (1990) on Tanzania; Sajo (1988) on Philippines; Bell (1987) on South Africa; Mackintosh and Whyt (1988) on Mozambique; Thomas (1989) on Bangladesh; C.H. Hanumantha Rao on different aspects of the states of India; Arun Ghosh (1988) Ghatak and Ghatak (2002) and Bardhan, (2003), (2004), on West Bengal; Crook & Svenson, IDS, Sussex, UK,1999 on India and West Bengal; Thomas Isaac (2000), on Kerala; Abdul Ajiz & David Arnold edited "Decentralised Governance in Asian Countries' are only a few to mention. We mention some more in the references. The upshot, however, is that in most of these countries the progress remained painfully slow, which in our view is because of the rigidities due to vested stagnatory interests prevailing in the political economy of the countries.

To avoid this, in multi level planning, a precise focus at each level is desirable, and the solutions as they emerge, become effective and focus-specific so far as the areas and the community are concerned. The proximity to an area, which sub-national level planning makes possible, also means greater access to information. This is an extremely crucial factor for attacking the rigidities and inadequacy of the performances. This still retains the need for a level of coordinative central planning mechanism with clearly defined areas of common public interest and need for lumpy investments.

One more important aspect is the share of payoffs among involved agents. The alleged 'lack of political will' is likely to have resulted from such involved conflicting interests and can be resolved by a proper central authority adequately equipped to combine the interests consistently<sup>23</sup>. That is what decentralised development can do if neutrally supervised and coordinated with a consistent grand plan.

#### 4. Decentralised Planning: Concept, Process and retrograde Blocks.

Decentralised planning is neither a substitute to centralised planning nor an exclusive bottom up process. It is in fact a two-way process, which begins both at top – national or state level as well as at local grassroots level simultaneously, and the two merge with each other at a point below where centralised planning becomes irrelevant and above where micro-planning is meaningless. The micro-level planning begins with the analysis of the local needs of the people in small areas and a framework, which rationalises and integrates them with the state and national goals over time. Thus the conceptual framework of the decentralised planning system as emerging for the country is depicted in Chart 1 below.

Decentralised planning increases *the need* to utilise dormant resources and skills and the ‘linkage effects’ of development. These are required to break the structural, technological, institutional and organisational obstacles to overall growth and to ensure an equitable spread which has to be better identified when viewed in the proximity of the specific area and the people. And this is constrained by the presence of power groups with vested interests exerting retrograde influence.

The chart below, has been made on the basis of a similar one suggested by Thapliyal (2000). Here we see how even in a decentralised approach the higher levels have to remain conversant and objective-oriented. The process actually involves an integration of top-down decisions with the bottom-up ones. The identification of the needed deliveries not only requires true participation from below but also the cost implications for all alternatively implementable choices and their least cost value. This needs coordination and free movement of information from top to bottom and vice versa.

#### Conceptual Framework for Decentralised Planning\*

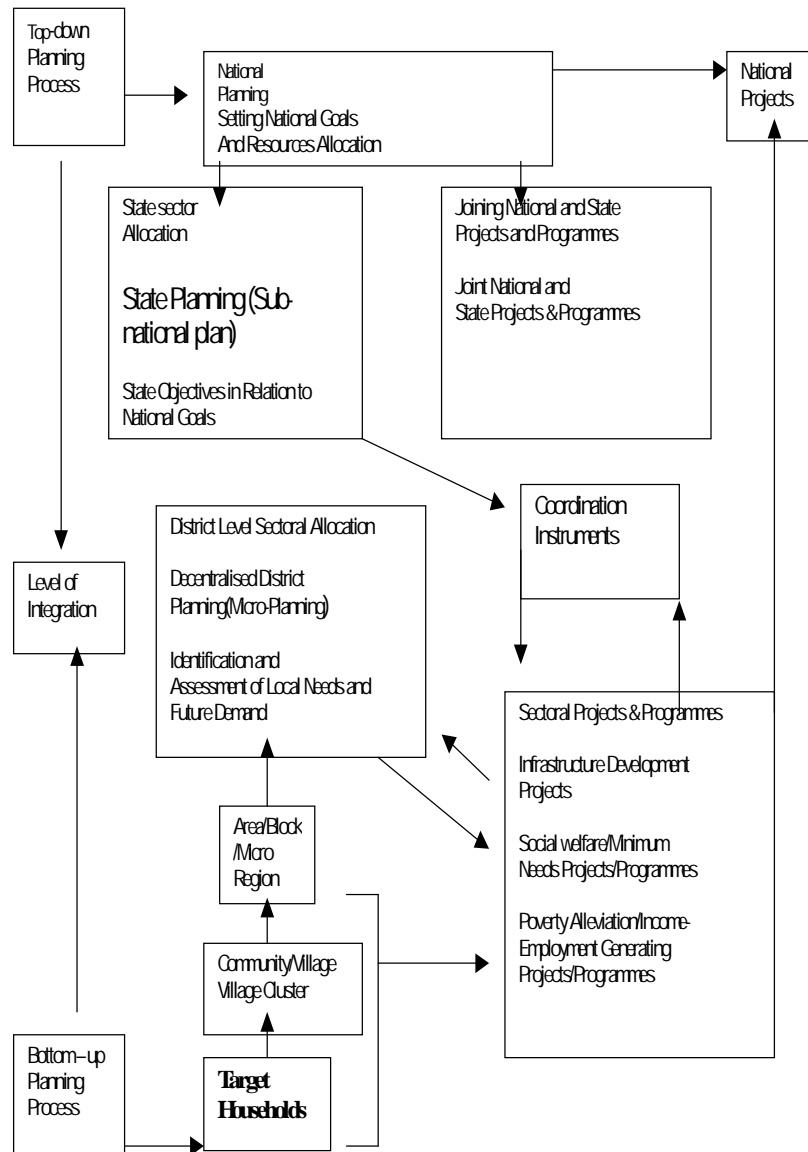


Chart-1 The Levels and their Integration

[\* Improved on Thapliyal (2000)]

However, the factors crucially depend on two fundamental sources of efficiency: (a) The local comparative advantage vis-à-vis the global development, something that will change over time, and whether efficiently or not, would depend on choices made at all levels; (b) the constraint of the existing technology of input-output-information relationships that requires change and does not move through infinitesimally small quanta of shifts injected through local employment programmes. It requires a **critical mass** to take the process on to a self-sustaining growth path. Efforts not consistent with this functioning logic are bound to be dampening. And meticulous coordinative combinations will be needed. This is endorsed by the underlined part of the following chart.

Decentralisation – Examples of Pros and Cons

Pros	Cons
<p>Better service delivery:</p> <ul style="list-style-type: none"> <li>● More adequate flexible innovative cheaper;</li> <li>● Mobilising the comparative advantage of local enterprise and the local non-profit sector</li> </ul>	<p>Dangers for service delivery:</p> <ul style="list-style-type: none"> <li>● Decentralisation of corruption and untamed spending; rolling-back of many of the economic and particularly social functions of the states.</li> <li>● Local cadre will not be independent enough to take responsibility</li> </ul>
<p>Local democratisation:</p> <ul style="list-style-type: none"> <li>● <u>Integrating people's needs and interests and local organisations and enterprises with the freedom to act and to articulate their views and needs</u></li> <li>● Training ground for a participatory/democratic culture, negotiation and conflict settlement</li> <li>● Granting a certain autonomy and political integration to minorities.</li> </ul>	<p>Local politics is still politics:</p> <ul style="list-style-type: none"> <li>● Reproduction/re-labeling of local elites</li> <li>● <u>Poor people may refrain from promoting their interests</u></li> <li>● Local politicians may be responsive only to the local needs of their defined constituency with <u>vague accountability</u>.</li> </ul>

Source: Steinich (2000) Cited in "Land Reforms" a presentation made by Prasad Ranjan Roy, the then Land Commissioner Government of West Bengal, based on IDS Sussex material referred below

The above categorisation of the favourable and adverse factors clearly indicates that the negative strength of the process may very well dominate. Hence, for proper functioning of the process, for transforming the incentives continuously towards the targeted progressive forces, and to negate the presence of rigidities in the structures and relations, the presence of an effective monitoring centre becomes necessary.

## 5. The Search for a Plan Model Combining de-Centre and Collectivity

Here we construct an analytical model that combines the two levels formally to make our point somewhat rigorously.

### 5.1 The Elements and Analytics : A Discussion

The integration of scale-economy factors, scope-economy factors and local-advantage factors is crucially important for an effective design of actions to be undertaken. As a result, a combination of degree of the centrifuge along these issues, and a related correspondence mechanism between the associated economic spaces is important. The objectives involve both collective and individual good of the people at all these levels. It is still a matter more of collective choice at smaller and lower nodes of authority than marketisable individual choice.

This is a feature that emphasises the role of a coherent decomposition of consistent centralised planning into multiple levels of sub-national governments. The essential problem of planning still remains efficient mobilisation and generation of surplus, its optimal allocation among sectors and techniques and attainment of sustainable growth, development and distributive justice. The aforesaid combination of scale-scope spheres and related correspondences among relevant economic spaces imply a thorough coordination mechanism that can avoid the so-called government failures, market failures and coordination failures (Ghatak and Ghatak, (2002)). While West Bengal could move along a path of combination with land

reforms and coordination, a highly discontinuous, disconnected type of decentralisation that was introduced in UP created a major information hiatus, detrimental for effective unfolding of the processes and their reach to the people. Hence it always requires a combination of degrees of decentralisation across multiple levels. The purpose of the present section is to sketch a possible analytical argument in its favour.

In totally centralised planning, the CPA (the Planning Commission in India) decides on the allocation of available resources among possible uses making the best dynamic composition through the best technology according to the CPA. However, this traffic is never totally unidirectional. The CPA takes account of all relevant information and constraints specific to the regions, using its own information channels connecting the regional decision-executors and agents. These agents are often bureaucrats and officials. Moreover, the double-way flow of information and exercises did, in fact, involve local decision-executing units (Kornai (1967)). *Thus some decentralisation is always there in planning, which essentially tries to combine the public and private requirements.*

In technical language this is a self-mapping on the allocation space where the points embody delivery of public and private goods, an optimal transfer function over time, adequate incentive structure, acceptable environmental state (sum of natural physical, human and 'social' capital) and optimal generation and allocation of surplus and technology. This implies the possible *existences of a continuum of decentralisation* in a multidimensional space. Optimality then will require locating the best point on this continuum, which virtually brings about a balance between centralisation and decentralisation.

## 5.2 *The Highlights of the Model*

There is a long-identified conflict labeled as a group-size paradox, first reconstructed in political science by Olson

(1962,1968) and since then restated in many relevant contexts. When decision-making involves collective considerations and actions, according to Olson, individual benefits will wither away, as the size of the group increases. Now, decentralisation implies moving from totally centralised planning, more towards local collective bodies. Then if the paradox holds, the more such a body involves greater number of people, the more it is likely to break down because of increasing strength of the conflict. As a result, Olson implies, a totally centralised command economy is likely, either to break down or to produce counterproductive results. Hence shifting to decentralised decision-making from central planning seemingly is a better move. However, as decentralised decision-making units (the PRIs) are still large groups, their survival is threatened by the same token. Thus implicitly Olson advocates an atomistic decentralisation to individual level, which virtually dismantles any social planning. ***The conflicts and anomalies are rooted in the coexistence of features pertaining to both public good and private good, in the effects delivered through the programmes.*** However, this problem has been resolved.

Contending Olson, Esteban and Ray (2001) have shown that there is always a value of collective decision-making that maximises benefits arising out of convex combinations of public and private consumption and so is not characterised by the Olson-Paradox. We can use this model in our search for an optimal combination which we present below.

These considerations are important because many characteristics of development are either time-irreversible or hard to reverse and compensate. Besides, effects on benefits and costs both have compounding strengths over time. Thus careless decentralisation responsive to international capital in the name of democracy and freedom may be self-defeating and lead to a different type of collapse. The 'development of the people for the people and by the people' as labeled by Streeten, has to

be both bottom-up and top-down simultaneously. This requires a consistent centralised planning coherently structured over multiple levels of governments. This is what we examine theoretically below.

We may briefly summarise Esteban and Ray (2001) as follows. Localities are picked up by common interest leading to a single interest group identified with the number of options available. Options are different over the publicness content of the outcomes, over the values of which group preference functions are defined;

G: the number of options and interest groups comprising  $G_i$ 's, the i-th interest group such that  $\sum_i G_i = G$

N: total population;

$N_i$ : membership of the i-th group

$G_i$  : the i-th group, identified by the common preference of its members, perception of benefits and costs of the members being the same for all in the group. Utility function of a group is the same as that of its members. This follows from the fact that the choice concerns the delivery of goods having publicness characteristics. Similar-minded people on these issues come in the same group.

P : the public components in the options

M : the private components in the options

a: the level of effort contributed by an individual to keep his preference operative; a is aggregated to yield  $A_i$  for the group i.

On the basis of a utility function, same for the individual and the group of which he is the member, given by:

$$U(w, a) = w - v(a), \quad (1)$$

where, w is the benefit and v is actually the convex cost function of effort, Esteban and Ray derive the effect on group of changes

in group actions and also some equilibrium value of degree of publicness  $\lambda \in [0,1]$  supported by the preference structure. This is derived from the fact that the per capita benefit to each member, when the option is 'i', is chosen by the society:

$$W_i = w(\lambda, N_i) = \lambda P + (1 - \lambda) M / N_i \quad (2)$$

The perceived share of publicness of an individual member of group i is given by  $\lambda P / W_i$ , and  $(1 - \lambda) M / W_i$  perceived share of privateness.

By maximising expected per capita utility and then working out the individual contribution of effort under equilibrium choice by the group members, yields the equilibrium vector of success probability that the option 'i' is chosen, and a value of the total effort A. The chosen option actually assigns the same effort to all the groups and thus  $A_i$  for all i and so  $A = [\sum_i A_i]$

In this model Esteban and Ray resolve the Group-Size Paradox, and by way of doing this they derive an equilibrium decision function  $\lambda(v'(a))$ ,  $\lambda' < 0$ . The result shows that there is a nontrivial size of the group that survives the divisive tendencies and in equilibrium that group size will be chosen through the choice of  $\lambda$ . This we use to define a **function of decentralisation**  $\lambda(\delta)$  where  $\delta \in [0,1]$ , is the degree of decentralisation.

We do so by making an assumption that given total N, as  $N_i$  increases, implying that number of groups falls,  $\delta$  falls, that is,  $\delta \rightarrow 0$  which implies falling decentralisation, as  $N_i \rightarrow N$ . Now, with rising  $N_i$  marginal cost of individual effort rises, because of the nature of the cost function. Convexity of cost means cost increases more than dose effort. As increase in the group size means that more functions will have to be covered by the group than in smaller groups and so, individual's efforts have to increase. Now, maintaining all others' effort level in the group (of a larger size), increase in individual's efforts implies increasing the marginal cost of the benefits, as efforts relate to many other costly changes in the combinations. Then, for falling  $\delta$ , share of

publicness will have to fall to retain cost effectiveness of effort. Then  $\lambda$  will be a positive function of  $\delta$ ,  $\lambda'(\delta) > 0$ .

Hence in the  $\delta - \lambda$  space,  $[\lambda(\delta)]^P$  function is defined which gives us the combinations of publicness and decentralisation from the demand side of the society. We use the inverted function:

$$\lambda = [\lambda(\delta)]^P, \lambda'(\delta) > 0 \quad (3)$$

as the one representing the relationship of decentralisation with the degree of publicness depicted in the Figure-3 below.

On the other hand, such a relationship from the supply side of the society can be derived from the costs of decentralisation. This we can work out using alternatives in Input-Output (I-O) relationships effective in the economy, which will vary over the size of the public sector handled generally by central/local authority.

In that case the argument runs along the following line:

- (i) Given input-output coefficients and all associated prices, output maximisation or value added maximisation determines a unique allocation for a point of time and exogenous public good-private good choice. [Assumed, low cost public goods are producible locally, but higher cost ones are not].
- (ii) More value of public goods at a point of time increases temporal costs at each point of time over entire sequence of time – hence it is a matter of longer range intertemporal decision-making, i.e., coordinated planning.
- (iii) Out of the many feasible I-O choices, one chosen at any point of time, differing in public good contents, will determine a unique path over time for chosen combination of public good and private good; and varying this initial choice of combination more toward publicness over the entire range, a higher cost of more

public goods both at local or national levels will be involved.

- (iv) Thus more publicness will involve less decentralised control in the supply side.

Thus the process will determine a unique path for chosen combination of public-good and private good, because of implied concavity of benefits as varying this combination more towards publicness, increasingly higher cost of more public goods both at local and national levels will be needed.

### **The model of a plan involving public goods**

Consider a preordered  $n+2$  vector space consistent with the real number system, such that mapping from one to the other is always possible. Input-output (I-O) configurations are representable by points in this space. The problem is to find out the best time-path of I-O points to a selected target. We avoid using techniques from **Graph Theory**, which can show the possibility of optimal allocations at multi-level planning<sup>24</sup>. We will take a different route

At any point of time the basket of output produced by an  $n$ -commodity economy can be represented by a vector in  $n+2$  dimensional vector space, where there are  $n$  goods the residual dimensions being labour and time. Each such point has some I-O configuration underlying it. Thus a movement from one such point to another at the next point of time necessarily associates also a movement from the initial underlying I-O table to the corresponding one at the next point of time. Since not all output combinations are feasible, the temporal possibility sets comprise discretely scattered points and, as a result, so are the intertemporal possibility sets. Not all convex combinations of the points are feasible. (See the figure1 (a) p 28 for a two-dimensional cross sectional presentation).

Thus each temporal I-O configuration contains infrastructure capacity associated with it and that is compatible with the values

of the outputs of corresponding sectors, such as, transport, power, health, education and so on. Moving from one such point to another feasible one will mean two things: (i) the value of infrastructure sector outputs has changed and (ii) most of the input coefficients have changed. The first corresponds to the infrastructure capacity and the second to the resulting productivity changes<sup>25</sup>.

In moving from one such allocation point to another at some end point, there may be different paths with different economic contents. For example, the input coefficients (including those on capital, or any other future-oriented activity) required to move over from one allocation to another, may imply that there are two different paths with distinct cost-intensity. Then inter-temporal movement, over allocations, involves the choice of the best path according to some defined criterion. Even temporally there may be quite a few I-O possibilities with different cost implications<sup>26</sup>.

Let us start with an initially inherited I-O configuration, labeled as  $A^0$  in the figure1. We also take the final target as given for the time being. To distinguish the pure public goods we first define a continuum  $[0,1]$  of publicness characterised by different degrees of excludability. Thus the value 0 of a good on this interval means that the good is exclusively private, while value 1 will mean a totally public good without any private consumability – an open-capacity primary school, for example. For the ease of presentation, any non-private good  $X_{ip}$  is considered public good with its publicness value well defined. The initial allocation  $A^0$  represents a given I-O situation, which is the transaction configuration between all such goods currently in use. Let the value of NNP (or value-added) at  $A^0$  be the weight assigned to it. In such a situation the column of consumption determines the size of surplus allocation of which dividing in capacity building or expanding output, new or old is an associated problem of planning. In the next period, given

all other things, the consumption column and so the surplus from the new I-O possibilities has to be decided. The choice has to take into account the cost of reaching the overall target ahead, which both the local and central governments know. The governments and associated decision-nodes of people will interact to examine various consistent sequence, of consumption possibilities and the least cost one in reaching the final target will be taken. We shall take up the public-good details below. First we describe the feasible allocations and I-O table sequence in the next paragraph.

$A^0$  is represented under two-dimensional restriction where the commodity combination trivially will represent the associated publicness-privateness combination also. Each  $A^i$  follows I-O interdependence and existence of paths to and from them are depicted by lines of incidence as given in figure 2 (p 34).

Now from  $A^0$ , take the value of surplus  $S^0$  to have been decided for the moment, and there will follow other I-O possibilities in the next period, representable by  $\{A^1_i\}$ ,  $i = 1, \dots, k$ , where  $k$  is the number of such feasible points. These points will vary over their consumption, allocation, and so, over value-added or NNP. As for one  $S^0$  there are many such points, varying  $S^0$  yields many other such points. From a given  $S^0$ , which one point in the next period will be chosen depends on the cost-effectiveness of the resulting sequence to the final target. New  $A^1_i$ 's carry different cost contents for given consumption bundle, while same cost for different consumption bundles is possible. In that case obviously the least cost bundle will be a better candidate, provided that is optimally consistent with the entire path to the target. Here considerations about the properties of the public goods will be relevant.

Consider a few distinct combinations of locally and non-locally producible/deliverable public goods (points like those in the Figure1 with higher dimensional I-O underlying). Even the points with identical cost will differ in terms of capacity on

productivity/delivery. Taken with intertemporal cost-effectiveness, points are very likely to be distinct and ordered due to non-substitution possibilities, as in conventional I-O formulations. The choice simultaneously involves considering fixed and variable costs and local and non-local supply. As all combinations are also cost-wise ordered and choosers are rational, a choice will be made provided some criterion to define and choose big/small projects can be devised. For, the choice has to be made from the following categories: {[fixed-big] non-local}, {[fixed-small] non-local}, {[fixed-big] local}, {[fixed-small] local}, and the range of variable costs will be determined by the nature of the fixed cost to be incurred for the choice. How is the choice likely to be made?

Take any achievable consumption value. There may be multiple cost possibilities because of the multiplicity of consumption bundles valuing the same. The value can be distributed differently over degree of publicness and local/non-local supply. Note that each consumption allocation is a definite public-private and local-non-local combination for which there is only one cost. Setting the uniqueness problem aside for the moment, with any given end period target, there will be a least cost set of choices spread over the entire sequence over the time horizon. (See figure2, p34). From Fig.1(a), the feasible next period incidences are depicted and in 1(b) only the cost-effective ones will be retained (compare figs.1 and 2) , with values attached to allocation points are value-added (or NNP) and those on paths are costs due to that part of the path only. The desired target of value 50 is reached along the least cost sequence (indicated by double arrows in fig. 2 ) where the cost of the sequence is simply the sum of the cost weights of the paths.

Thus out of many feasible I-O choices from one at any point of time, differing in public good contents, the optimum

one will determine least cost paths for chosen combination of public-good and private good; invoking non-substitution theorem the problem of uniqueness will be solved. In varying the combinations over publicness, a higher cost of more public goods both at local and national levels will be involved. Then, given the constraint of total surplus to be allocated, more decentralisation in the supply side cannot bear the cost of a large-scale public sector {[fixed-big] local} and so, has an inverse relationship with the degree of attainable publicness.

The above argument may be represented using matrices. Each feasible combination of public good components implies a cost derivable from the column vectors of input coefficients of the sector multiplying it by the respective price vector. The cost will arise out of, and vary across, local and non-regional operations to make them available. The basic difference between local and distant making of public goods lies in scale. The more local the less costly it has to be, and feasibility requires smaller scale compared to distant provisions. The cost increases with distance between the production and consumption points. For example, the cost of a local health centre or a primary school is far less than that of a fully equipped district hospital/school/university. The degree of publicness also increases with distance. While the locally produced (provided) unit is consumable by the local people only, excluding nonresidents by purchasability in terms of travel costs or other hassles, the more the people under the clientele, the bigger has to be the scale of operation, be it education, health or transport. Hence, given other outputs, an I-O table will be less costly with more local public goods than with more distant big scale public sector. Hence, for a range of public goods a cost function may be defined by an increasingly rising curve with the size of clientele area and the population catered. This hints to a situation characterised



Figure 1 (a)  
[Representing  $[I-A] = C$  in two dimensions]

Figure 1 (b) [Allocations & costs]

by a negative publicness-decentralisation relationship, which is shown rather rigorously below.

Let

$$[I-A] X = C \quad (5)$$

be the grand I-O representation that contains all permutations and partitions<sup>27</sup>. -

Any static I-O table is presentable by the following simultaneous equations when three industries are assumed to exist. We, for simplicity, confine to a 3x3 case, where the second and the third sectors represent centrally planned and locally planned sectors respectively.

$$\begin{aligned} a_{11} x_1 + a_{1p} x_p + a_{1L} x_L + c_{11} x_1 &\leq x_1 \\ a_{21} x_1 + a_{2p} x_p + a_{2L} x_L + c_{22} x_p &\leq x_p \\ a_{31} x_1 + a_{3p} x_p + a_{3L} x_L + c_{33} x_L &\leq x_L \\ a_{01} x_1 + a_{0p} x_p + a_{0L} x_L &\leq x_0 \end{aligned} \quad (6)$$

This is the basic I-O table, which may be summarised as:

$$[I-A] X = C \quad (7)$$

The incorporation of dynamics will simply increase the number of columns in the matrix.

It is possible to capture the publicness and privateness by decomposing the matrix into relevant partitions as follows:

$$\begin{bmatrix} A_{NR} & A_{NRP} \\ A_R & A_{RP} \end{bmatrix} \begin{bmatrix} X \\ X_P \end{bmatrix} + \begin{bmatrix} C_X \\ C_P \end{bmatrix} = \begin{bmatrix} X \\ X_P \end{bmatrix} \quad (8)$$

Here regionality and non-regionality are denoted by the subscript R and NR and large-scale publicness associated by the subscript P and small-scale publicness by subscript L respectively on output X and consumption C.

Now, as an economy optimises, any temporal point attained is a part of a time sequence of discrete points representing subsequent allocations. We visualise a process where an I-O table pertaining to an allocation actually attained is a chosen one consistent with the objective of attaining the optimal dynamic path which comprises subsequent allocations and the underlying I-O tables. Bellman's Maximum Principle applies without any problem. This is clearly visible in Figure2 (p 34).

planning of local-central coordination. There is a trade off between publicness and decentralisation captured through costs-return profiles of the planning choices and picked up in the  $[\delta (\lambda)]^s$  function that we suggest and define in the figure 3 below.

Figure 2 [The Optimal Path with double arrows]

We only sketched the outline of the exercise that suggests another supply side function on decentralisation-publicness space.

An economic planner may be viewed as an intertemporal producer of GDP or Net Value Added with fixed and variable costs. Fixed costs in this context are those made on the fixed inputs. The economy or the planner invests in building infrastructure.

The solution captures the fact that as the size of publicness will increase, it will require more central supervision and planning to operationalise ensured provision of public goods. Thus, from this supply side angle, the more the publicness content, the more will be the costs (as more of other final goods will now be necessary more will be the input requirements) and centralisation. This relation is captured in equation (9) below.

$$\lambda = [\lambda (\delta)]^s, \lambda' < 0 \quad (9)$$

The I-O structure given by (8) assigns responsibilities to local/sectoral planning departments on the basis of chosen degree of decentralisation in the sense of our function from the supply side. It is plausible to assume that the more public cost is involved, the more it requires central regulatory control because of overall

**Fig. 3**

The trade off becomes clearer and all the more significant as we see that the scale of sunk costs and the length of gestation period of public-good projects increase as the size of publicness goes up (width of nonexcludability-benefits of large road or power networks, for example).

In such cases, leaving them to decentralised local governments or bodies is likely to involve conflicting game theoretic situation, presumably, Prisoner's Dilemma on whether to put cooperative effort or not on the part of concerned individuals. In such cases the presence of a monitoring authority from above may transform the situation of Nash noncooperative equilibrium to an Axelrod game of state-dependent dynamic, evolutionary cooperation. Depending on the endogenously generated discount factor of similar people [cooperate, cooperate] becomes the equilibrium. This transformation shows that in such situations a need for a central presence involving more costs due to monitoring, information and networking arises. Thus we see that a function  $[\lambda (\delta)]^s$  is there in most of the probable cases of multi-level planning. Hence, we make the following propositions:

(A) Taking  $\lambda$  as the index of degree of publicness for the economy as a whole and  $\delta$  the degree of decentralisation, both ranging between 0 and 1, from the beneficiaries' point of view, there is a continuous equilibrium  $\lambda(\delta)$  function which is **positively** sloped with  $\lambda(0) = 0$  and  $\lambda(\delta) \rightarrow$  to some finite value as  $\delta \rightarrow 1$ .

(B) From the government's side there is a continuous equilibrium  $[\lambda(\delta)]^S$  function which is **negatively** sloped with  $[\lambda(0)]^S = \infty$  and  $[\lambda(1)]^S \rightarrow$  to some finite value as  $\delta \rightarrow 1$ .

(C) Under economically plausible regularity conditions, the solution to these two equations yields  $[\lambda^*, \delta^*]$  the optimal combination of centralisation (publicness) and decentralisation.

(Proofs depend on the existence of an interior solution which is given in the Appendix).

Two points are in order:

- (1) Changing the values of  $\lambda$  will affect the weights along the entire future course. Hence changing  $\lambda$  has both temporal and intertemporal effects. There is no reason why  $\lambda$  cannot vary continuously over the entire unit interval, even with discrete allocation points.
- (2) Raising the value of  $\lambda$  from the supply side leaves some residual type of surplus to be utilized for decentralization. The optimization will have to take care of this.

As a result, the optimal allocations for maximised NVA, define the function.

$$\text{Max NPV} : \delta \rightarrow \lambda \Rightarrow \lambda = [\lambda(\delta)]^S$$

This function is defined on the same  $\lambda - \delta$  space, we used earlier.

This result reveals two things: (i) there will always be a need for non-zero, non-trivial combination of *centralisation (publicness)*

and *decentralisation*; and (ii) the optimality depends on the political-economic character of the economy in question, as the solutions are dependent on costs and benefits accruing to all members, which in turn depend on whether and to what extent the socially inertial frames are active.

## 6. Concluding Remarks

We have made the following arguments to make our point:

We first argued that because of the presence of power asymmetries decentralised development till the current endeavour, remained highly ineffective. This factor rendered the current international approach, mainly under the leadership of the World Bank, superficial and somewhat centralised from outside, eventually connected in a manner to the interests underlying the power asymmetries prevailing in the present world economy. We traversed through the experiences and meaning of decentralised development *to derive the insight that delivery of development involves both publicness and privateness embodied in the goods, activities and services*. Taking this as a point of departure, in the next step we tried to highlight our construction of a theoretical model, to show that working out an optimal combination of central and decentralised planning is possible. Moreover, in the present backdrop, such a combination is necessary for the purpose of development. The idea of dismantling of central planning in favour of market-based decentralisation is inappropriate for the purpose of development in the world economy, which includes the developed countries also.

This enables us to reconsider a new form of planning that breaks the inertial frames adverse to the interests of the majority. Moreover, by using modern technological achievements, this new form of planning can contribute to the optimal decentralisation for the world society<sup>28</sup>.

From this angle socialism perhaps was the first active system that virtually depended effectively on decentralisation, even

within its envelope of *democratic centralism*. The soviets and the communes were not totally dictated from above, but allowed to debate on possible allocations and their productivities. Thus decentralisation, until and unless it declares market as the 'sovereign', is not against socialism. Besides, the democratic mechanism through which this new variety of decision-making and processes of development is infused involve, at least apparently, the majority of the people, which is the basis of actual socialism. This point has deeper implications for the entire process. In cases of forest resource management, for example, Joint Forest Management (JFM) has emerged as the way out. Now, JFM contains characteristics of socialism, even if the present pole of power wishes it away. A convergence is on, since, as warranted by our optimality exercise, that is the best for the majority.

Hence, taking the ongoing decentralisation as a movement towards improved distributive and social justice, we note that it is not decentralisation *per se* but the design and depth of the programmes that matter. And the planning processes have to combine and coordinate in both ways, from above and below.

## Notes:

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1. World Development Report (2001)
2. See for example Joseph Stiglitz (1999), Basu (2001) See also Stern (1999).

3. Bardhan and Udry (2000).
4. The concomitance of globalisation and decentralisation is suggested in the literature; see, for example, Stern (1999), Stiglitz (2001), Bardhan (2002) and World Development Report (1988, 1990, 1999-2000, 2003)
5. Echeverri-Gent, John. (1997), Arun Ghosh (1988).
6. Schumpeterian logic operates. While development was synonymous with innovations in his Theory of Economic Development, innovations were with many dimensions including production technology, financial management and organisations of all economic activity. The world process has been active in mostly the first two and has recently been emphasising the last one. Decentralisation drive may partly be viewed as reflecting organisational innovation. Besides, somewhere else Schumpeter argued that the upward pull of innovation does not sustain itself because of 'vanishing investment opportunities'. It looks both the Schumpeterian processes have been working to bring about the recent drive. See Chakraborti (1983) Dasgupta and Stiglitz (1980) Schumpeter (1949, 1953) Schmookler (1969), for endorsement of the argument.
7. Bhaduri (1997)
8. WDR (2001, 2003), Bardhan in World Bank Annual Conference on Development Economics Vol. 1995.
9. Bhaduri (1973), Bardhan ((1984), 1995)). Bagchi (1982) Stiglitz (1989), World Development Report (1990).
10. M. Govind Rao (2004).
11. See Litvack and others (1999)
12. Gupta (2002) has elaborated the issue of social capital and need for new institutions; see also Dasgupta and Serageldin (2001).
13. In the context of transition to a progressive stage, the presence of backward pull through the remnants of earlier stages was noted way back in the mid 19<sup>th</sup> century. Marx (1975).
14. For an excellent review of the literature on the relevance of democracy in development please see Gupta (2002).
15. Bardhan and Mookherjee 2000, 2001, 2004; Besley and Coate 2001
16. Meir and Stiglitz (2001); Hirschman (1998)
17. For an introduction to the phenomenon, see Bhaduri (1973), Stiglitz (1987), and for presence in many such countries Bagchi (1982), Bardhan and Udry (2000)

18. World Development Report (2001-02), World Bank study on Rural Development (1989), Meir and Stiglitz (2001)
19. The absences include: physical capital, entrepreneurship, correct market prices, correct international trade, active and effective government, human capital and correct institutions. see Adelman (2001).
20. Adelman in Meir and Stiglitz (2001)
21. See, for example, Bardhan and Udri (2000) Ray (1996).
22. It is not very clear where the consensus to go decentralised first emerged. It came from struggling political leaders, from international institutions like UNDP and the World Bank. It also came in places as a new people's movement, as in the case of Kerala, India. However, the close contemporary nature of these moves shows that a number of interest groups were thinking of this for different reasons.
23. Dutta (2001, 2003) has recently pointed out this aspect. This only reveals that the strength of the pressures from the power groups takes many institutional forms. To resolve, transforming the game structure from strictly noncooperative to an evolutionarily cooperative one is required.
24. Such a model was worked out by Chakraborti & Sankrityayana (1995) and in Chakraborti and Bandyopadhyay (2003). For an introduction to application of Discrete Mathematics in social sciences, see Roberts (1993).
25. Since a new good or resource may enter at any time because of some new discovery and innovation, through allocations oriented towards technological change, the dimensionality of the set is not closed. However, since we avoid uncertainty in this initial attempt, it is assumed that any addition of a dimension is foreseeable in terms of allocation tables resulting from past allocations with inventive inputs having been incorporated adequately.
26. The advantage of the discrete-mathematics approach is that it can easily incorporate the presence of economies of scale, lumpiness or any other form of non-convexity and/or discontinuities. We do not have to avoid many realistic situations for the sake of maintaining concavity or quasi-concavity restrictions on certain sets, or, so to say, for the sake of maintaining twice-continuous differentiability restrictions on important functions. See Chakraborti and Sankrityayana (1995).
27.  $\{[I-A] X = C\}^P$  of the temporal I-O feasibilities, including those in the decentralisations contemplated by Malinvaud (1967) Arrow and

Hurwicz (1960), and supported by, Leontief (1953) Kornai (1967) Kornai and Liptack (1963) Heady, Randhawa and Skold (1967).<sup>1</sup>

28. This is thematically akin to the note on Decentralisation made by Patnaik (2001).

## Appendix:

### **Proof of the existence of an interior solution:**

From the way the two functions have been defined, it is easy to see that a self-mapping transformation is implicit and it is possible to invoke a contraction mapping and apply a Fixed Point Theorem for the purpose. However, we do it in a simpler manner.

$[\lambda (\delta)]^P$ , and  $[\lambda (\delta)]^S$  are  $C^2$  with  $\lambda' < 0$ ,  $\lambda'' > 0$ ,  $\delta' > 0$ ,  $\delta'' > 0$ .

$[\lambda (0)]^P = \infty \Rightarrow$  very high public cost;

$[\lambda (1)]^P = 0 \Rightarrow$  a minimum public sector base, low regional public costs;

$[\lambda (0)]^S = \infty \Rightarrow$  very high cost, at this total centralization publicness is very costly.

$[\lambda (1)]^S \rightarrow 0 \Rightarrow$  the minimum public cost, similarly.

These two must intersect at an interior point.

## References

- Adelman, I. "Fallacies in Development Theory and Their Implications for Policy." in Meir and Stiglitz (ed.) 2001
- Arrow, K. and Hurwicz, I. "Decentralization and Computation in Resource Allocation" in Pfouts, R.W. (ed.) *Essays in Economics and Econometrics* University of North Carolina Press, Chapel Hill 1960.
- Aziz, A. and D.D. Arnold, eds. *Decentralised Governance in Asian Countries*. Thousand Oaks, CA: Sage Publications. (Articles on Bangladesh, China, India, Nepal, Philippines, Sri Lanka) SOAS 1996.
- Bagchi, A.K., *The Political Economy of Underdevelopment*, Cambridge University Press 1982.

Bagchi, A.K., *Economy and organisation: Indian institutions under the neo-liberal regime*. New Delhi: Sage Publications, 1999.

Baland, J.M. and J.P. Platteau *Halting Degradation of Natural Resources: Is There a Role for Rural Communities?*, Oxford University Press 1995.

Bardhan, P. “Decentralization of Governance and Development”, *Journal of economic Perspectives*(Website), November, 2003

Bardhan, P. *Institution in an Agrarian Economy* Oxford University Press, 1989.

Bardhan, P. “Decentralized Development”, *Indian economic Review*, Vol.31, No.2, 1996.

Bardhan, P. and Mookherjee, Dilip “Relative Capture of Government at local and National Levels” *American Economic Review* 90(2), 2000.

Bardhan, P. and Mookherjee, Dilip “Poverty Alleviation Efforts of Panchayats in West Bengal” *Economic and Political weekly* 28 February, 2004.

Bardhan, P. and Udry, R. *Development Microeconomics* Oxford University Press, 2000.

Basu, K. “Goals of Economic Development” in Meir and Stiglitz 2001.

Bell, T. “International competition and industrial decentralisation in South Africa”. *World Development*, vol.15; no. 10: 1291-1308, 1987.

Bhaduri, A. *An Intelligent Persons’ Guide to Liberalization* Penguin, Harmondsworth 1997

Bhaduri, A. “Agricultural Backwardness under Semifeudalism” *Economic Journal*, 1973.

Bird, R. “Taxes, User Charges and the Urban Poor”, in Bird and Oldman, 1990

Bird, R. and O. Oldman, (eds.) *Taxation in Developing Countries*. Johns Hopkins University Press. 1990.

Brennan, Geoffrey, and James M. Buchanan, *The Power to Tax*. Cambridge: Cambridge University Press. 1980.

Broadway, R., S. Roberts and A. Shah, “The Reform of Fiscal Systems in Developing and Emerging Market Economies: A Federalism Perspective,” Policy Research Working Paper 1259, Washington D.C., The World Bank 1994.

Chakraborti Pinaki, and Bandyopadhyay Chandan “Discrete Mathematics in Nonconvex Input-Output Dynamic Economics with Increasing Returns to Scale” Paper presented at the Annual Conference, ERU, Indian Statistical Institute, Kolkata, 2003.

Chakraborti, Pinaki .& Sankrityayana, J. “Discrete Mathematics in Dynamic Input-Output Economics with Nonconvexities, Discontinuities and Technological Change” Paper presented at the Xith Annual conference of IIOA, New Delhi 1995.

Chakraborti, Pinaki, “Market Structure and Technical Progress” Unpublished Ph.D. Dissertation, SIS, Jawaharlal Nehru University, New Delhi, 1983.

Craig Johnson, *Towards Accountability: Narrowing the gap between NGO priorities and local realities in Thailand*, ODI, 2001

Crook, R.C and J. Manor, *Enhancing Participation and Institutional Performance: Democracy and Decentralization in South Asia and West Africa*, Report to Overseas Development Administration, U.K., (1994).

Dasgupta P. and Serageldin, I. (ed.) *Social Capital*, , World Bank, 2001.

Dasgupta, P.S. and Stiglitz, J.E. “Speed of Industrial R & D” *Economic Journal*, 1980

Dutta Prabhat, *Panchayats Rural Development and Autonomy: The West Bengal Experience*, Dasgupta & CO, Kolkata, 2001.

Dutta Prabhat, and R. Bandyopadhyay, *Planning from Below* Dasgupta & CO, Kolkata, 2003.

Esteban, J. and Ray, D. “Collective Choice and the Group Size Paradox” *American Political Science Review*, September, 1999.

Echeverri-Gent, John. “Governance in a Globalizing World: Deconstructing Decentralization in India, China and the United States”. Charlottesville: Department of Government and Foreign Affairs, University of Virginia (mimeo) 1997.

Ghatak, M. and Ghatak, M. “Recent Reforms in the Panchayat System in West Bengal: Toward Greater Participatory Governance?” *Economic and Political Weekly* January 5, 2002

Ghosh Arun “Decentralised Planning West Bengal Experience” *Economic and Political Weekly*, 25 March, 1988.

Gupta, K. “Decentralization and Social Capital : Implications for Institutional Innovation in Forest Management and Development Planning in India Unpublished Dissertation, New York University, 2002.

Hanumantha Rao, C.H. ‘Decentralized Planning: An overview of Experience and Prospects’, *Economic and Political Weekly*, February 25 1989.

Heady, E.O., Randhawa, N.S. and Skold, M.D.(1967) “Programming Models of Interregional Efficiency and Land Use in Agriculture” in E. Malinvaud and M.O.L. Bacharach 1967.

Hicks, U.K. "Measurement of Capital in Relation to the Measurement of Other Economic Aggregates", in Lutz and Hague, eds, *Theory of Capital* 1961

Hicks, U.K. "Pareto Revealed", *Economica* 1961.

Hicks, U.K. *Development from Below: Local Government and Finance in the Developing Countries of the Commonwealth*. Oxford: Clarendon Press 1961.

Hirschman (1998) "The Rise and Fall of Development Economics" in A.K. Dutta ed. 1998.

Institute of Development Studies, Sussex *Topic Pac on Participatory Planning* (Year not quoted)

Jennei Litvak and Jessica Seddon eds *Decentralized Development Briefing Notes*, (World Bank), February 1999.

Klugner, R. "On Decentralization" Occasional Paper UNDP, 1994..

Kornai "Mathematical Programming of Long-Term Plans in Hungary" in E. Malinvaud and M.O.L. Bacharach (1967).

Kornai and Liptack "Two-Level Planning" *Econometrica*, Vol.33.141-69 1963.

Leontief, W. "Interregional Theory" in *Structure of American Industry*, Oxford NY, 1953.

Litvack, J., Ahmad and Bird *Rethinking Decentralization*; World Bank 1998

Litvack, Ahmad and Bird World Bank Report, Decentralizing infrastructure in developing countries 1998.

Malinvaud, M., *Activity Analysis in the Theory of Growth and Planning* Proceedings of a Conference held by the International Economic Organization 1967.

Manor, James. *The Political Economy of Democratic Decentralization*. Washington D.C.:The World Bank 1999.

Marjit, S. "Decentralised Financing, Governance and Public-Private Co-operation" *Economic and Political Weekly*, May15, 1999.

Marlow, P. "Fiscal decentralisation and government size". *Public Choice*, 56: 259-269. 1988.

Marx, K. *Economic and Philosophic Manuscripts, 1844*, Progress Publishers 1975.

Mathai, John. *Village Government in British India*, Low Price Publication, Delhi, 1993.

Mclure Jr. Charles E. "Comment on Prud'homme" *The World Bank Research Observer*, 10(2) 221-226, 1995

Meir, G.M. and Stigliz, J.E. *Frontiers of Development Economics A Copublication of the World Bank and Oxford University Press*, Oxford 2001.

Oates, W.E. *Fiscal Federalism*, New York: Harcourt Brace Javanovich 1972. .

\_\_\_\_\_. "On The Welfare Gains From Fiscal Decentralization". *Journal of Public Finance and Public Choice*, 2-3. 1997.

\_\_\_\_\_. "Searching For Leviathan: An Empirical Study". *American Economic Review*, 75, September 1985.

\_\_\_\_\_. "An Essay on Fiscal Federalism". *Journal of Economic Literature*, Vol. 37, September, 1999

Olowu, D. "Local government innovation in Nigeria and Brazil: a comparative discussion of innovational transfers and intergovernmental relations" *Public Administration and Development*, vol. 2: 345-357 ,1982.

Olson, M. *The Logic Of Collective Choice*, Harvard University Press, Cambridge, Mass. 1965.

Prabhat Patnaik "Decentralized Planning Vs. World Bank-Style Decentralization: A Theoretical Note", www.networkideas.org 2002

Prud'homme, R. "Dangers of Decentralization" *The World Bank Research Observer*, 10(2), 201-220, 1995.

Ray, D. *Development Economics*, Princeton University Press, Princeton (1998).

Roberts, F. *Application of Discrete Mathematics and Combinatorics in Biological and Social Sciences*. Rutgers, 1993.

Rondinelli R, "Linking decentralisation and regional development planning: the IRD project in Peru" American Planning Association, Summer issue: 348-357 (1984).

Schmookler, J. *Invention and Growth*, Harvard University Press, Cambridge, Mass. 1969

Schumpeter, J. *Economic Development* Routledge 1949.

Schumpeter, J. *Capitalism Socialism and Democracy* Unwin University Books, London 1953

Sen, Amartya and Dreze, J *India Development*, Oxford University Press 2000.

- Sen, Amartya *Development as Freedom* Oxford University Press 2002.
- Srivastava, Vinayak Narain. "Local Governance Under Colonial Rule: A Historical Account" NMML monograph 6, Nehru Memorial Museum and Library, 2003.
- Stern, N. "Globalization and Development", IMF (1999).
- Stiglitz, J.E., "Economic Organization Information and Development" in Chenery, H. and Shrinivasan, T.N. *Handbook of Development Economics* Elsevier, (1988).
- Stiglitz, J.E., "New Development Economics" *World Development*, 14(2):258-61. 1986.
- Stiglitz, J.E., "Comprehensive Development Paradigm", Mimeo. IMF (1999).
- Streeter, P. *Thinking About Development* Cambridge University Press, Cambridge, UK, 1995.
- Thapliyal, B. K., "Decentralized Development" *Journal of the National Institute of Rural Development*, 2000.
- Thomas Isaac, T.M. & Richard W Franke, 2000. "Local Democracy and Development: Peoples' Campaign for Decentralised Planning in Kerala". New Delhi, Leftword Books, 2000
- C. M. Tiebout, 'A Pure Theory of Local Government Expenditures', *Journal of Political Economy*, vol. 64(5), 1956.
- Tsai, H. "Population Decentralization Policies, Experience of Taiwan". *Industry of Free China* 1-12. 1990
- Webster, N.. "Panchayati Raj in West Bengal: Popular Participation for Working Paper 4353. Cambridge, MA 1992
- World Bank Policy Research Working Paper, No. 1259, Washington D.C., The World Bank., 1994
- World Bank study on Rural Development 1989.
- World Development Report, Published by the World Bank, 1988, 1990, 1999-2000, 2001, 2003.