

# Transforming Village Clusters into Territorial Production Complexes

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## I. Introduction

In order to conceive a well-balanced model of rural development, economically, socially and environmentally, the Government of India hopes to evolve an Action Plan for making the Tenth Plan, a People's Plan and Development, a People's Movement. The programme announced for attaining this objective is through the establishment of Knowledge Powered Village Complexes, known by the acronym "PURA". (Provision of Urban amenities in Rural Areas) This is a key element of "Vision 2020" and is intended to give a new thrust to the all-round development of viable village complexes through the twin strategies of 'Effective Planning and Implementation of Rural Development Programmes with People's Participation' and 'Effective Development Communication for People's Participation'. The programme PURA is essentially a Habitat Design to achieve prosperous, peaceful and safe human habitat in rural areas, that would improve the quality of life in rural places and lead to "Inclusive Rural Development".

The objective of this paper is to set the PURA Concept in the wider context of Holistic Village Cluster Development Planning to achieve "Inclusive Development". Given the initial push for the vision by the President of India, what is needed today is nothing less than spear-heading a nation-wide Village Renewal Movement, based on a wider understanding of the PURA concept.

## II. The Concept of a Micro Territorial Production Complex

Our past experience has shown that conventional development strategies, which emphasize the growth of gross national product per se, without at the same time looking into area and community specific potentials and needs cannot alleviate mass poverty and unemployment. It is in this context that we advocate layered models of territorial production complexes in our rural areas to trigger off the full utilisation of natural resources and human potentials.

A Microlevel Rural Territorial Production Complex is a model of spatial organisation, envisaged as contributory to developing agriculture and allied activities as well as small and medium enterprises, effectively in the rural areas and to promote the welfare of rural residents. Ideally, such a Microlevel Territorial Production Complex should lead to rapid agricultural development in the villages and also produce and supply various equipments, materials and consumption goods necessary, with appropriate technology for a basic needs strategy, guiding the local development. It will provide the necessary backward and forward linkages and seek to augment the value addition to the agricultural products emerging from

the rural areas and thus enrich the income of the local population. It is the linkages and flows, as well as the managerial improvements brought about to aid and facilitate the production activity in the primary villages, through encouragement and management of the production, processing and marketing activities in the functional area of a village cluster, that constitute the hallmarks of the concept of a Micro Rural Territorial Production Complex.

In such an approach, all incentive and subsidy programmes of the Government, as well as management, extension and training activities will be pooled and administered in a concerted manner to assist private initiatives in local areas. It will lead to a territorial division of labour, leading in due course to effective production relationships, determining the spatial structure of the economy at micro and mezo levels.

The strategy implied here must concentrate, more than in the past, on meeting the requirements of the small farmer, the small entrepreneur and the informal sector producer of services. Such a strategy calls for, and is in turn supported by, a special kind of appropriate technology, which will contain a greater element of technological innovation, governed by selective choice and adaptation applied to existing technologies.

In the context of our rural areas, the Micro Territorial Production Complex, as envisaged here, will be a relatively Homogenous Community of Interest Area, i.e. a Village Cluster.

### **III. Why A Village Cluster?**

In our present development context, the Indian village, with its small population, has ceased to be an economic and social entity for planning. The knowledge century demands a size suitable for the effective transfer of technology. Besides, people would want higher forms of services and of quality in provisions like health, education, agricultural inputs & services etc. There is therefore, a need to think in terms of 'viable unit areas of development in rural space'. It is in this context that the concept of a 'cluster of villages' comes as a useful grassroots level unit for planning, for organizing rural development programs. It is not a new idea and has been discussed, since the middle of the 1960's, though no concerted efforts were made to operationalize the approach. Now, with the PURA concept gaining ground, there has been a revival of interest on this approach to micro-level planning.

### **IV. Evolution of the Concept**

A review of the evolution of the thinking on 'village cluster approach' and of its relevance and usefulness as a tool for rural development would be a useful beginning to this discussion.

An early recognition of the concept was, when the First Master Plan for Delhi was prepared under the guidance of Albert Mayer of Etawah community development fame. The Delhi Master Plan adopted a hierarchical pattern of central villages, service centres and rural towns (based on Christaller's concept), for the limited purpose of bridging the rural-urban gap in the provision of social services<sup>1</sup>. A more concrete beginning towards this approach commenced when the Ford Foundation initiated in 1969, a Pilot Research Project on Growth Centres in collaboration with Govt. of India, envisaging a 'village cluster', around an identified growth centre, as an intermediate areal unit between the village and the block. It followed the typical spatial-cum-regional planner's approach of identifying a hierarchy of service centres (based on techniques like scalogram analysis), for extending a broad range of amenities,

services and infrastructure to all settlements in the block. Thereafter, the sectoral scenarios of development are developed for agriculture, industry, education, health and transport to create an integrated spatial plan of development. This approach was also recommended by the Working Group on Block Level Planning, set up by the Planning Commission in 1978.<sup>2</sup>

Around the same time, an International Organization – The United Nations Research Institute for Social Development (UNRISD), Geneva, initiated research studies to examine the relevance of ‘Growth Poles and Growth Centres’ for regional development in the developing countries. We (Prof. R. P. Misra and myself) undertook a prestigious project funded by this organization to test the relevance of this concept in a most underdeveloped area of India. This led to our field study in 1963 in the Bastar district of Madhya Pradesh, a most backward tribal district. After this experience, we returned with rich insights and boldly stated our conviction that what are required to stimulate developments in such areas are “Social Development Poles”, and ‘People Centered Development’, rather than ‘Growth Poles’. We viewed with great skepticism, the nature of ‘modern’ developments taking place in the area by external agencies, e.g. the Bailadilla iron ore mining - developments, which were sweeping the economy of the tribals, ‘off their feet’.<sup>3</sup>

From the above experience stems our criticism about the mechanistic methodology, promoted through the spatial-cum-sectoral strategy, advocated by the growth pole researchers which, while using sophisticated criteria for determining the status of settlement centers (e.g. ‘Population Threshold’, ‘Distance Norms’, and ‘Movement of People and Commodities’), blatantly ignored the inter and intra community relations in lower and grassroot level settlements and insights derived from the perception of rural contrasts and uneven economic and social development.

Since the 70’s, the concept of rural development has undergone many changes. It is now “Inclusive Socio-economic Development”, which inheres in it, the tasks of ‘poverty reduction’, ‘employment generation’, ‘empowerment’, ‘equity’, ‘sustainable development of the natural resources’, besides the provision of basic minimum services. It has to be generated from “within”, by unleashing the “Capillary Mechanisms” in the village situation, with people deciding their course of development and government supporting it. In this conception, the core tasks of rural development will include the fuller use of land and water resources without destruction, modernization of farming by extending processing and marketing activities, building non-farm and allied agricultural activities, setting up institutions like cooperatives and other forms of social capital, empowering panchayats and women and improving health and education services. We, therefore argue, that in order to bring about ‘Inclusive Rural Development, with people’s participation nexus’, the growth impulses need to be structured and built up at the level of “clusters of villages”, in a highly integrated and effective manner. This line of reasoning implies a new perspective and a much deeper ‘economic and social content’, of development addressed to both policy delivery and receiving sides. It is much more than ensuring merely a viable size of settlement for supporting a particular amenity or service. In this conception, the effectiveness of a ‘cluster’ at grassroot level depends not so much on the size alone of the population brought together, but on the degree of cohesiveness and integration among the constituent villages and social groups, quality of local leadership and capacity of rural institutions to bring the rural weak and poor within their fold. It is here

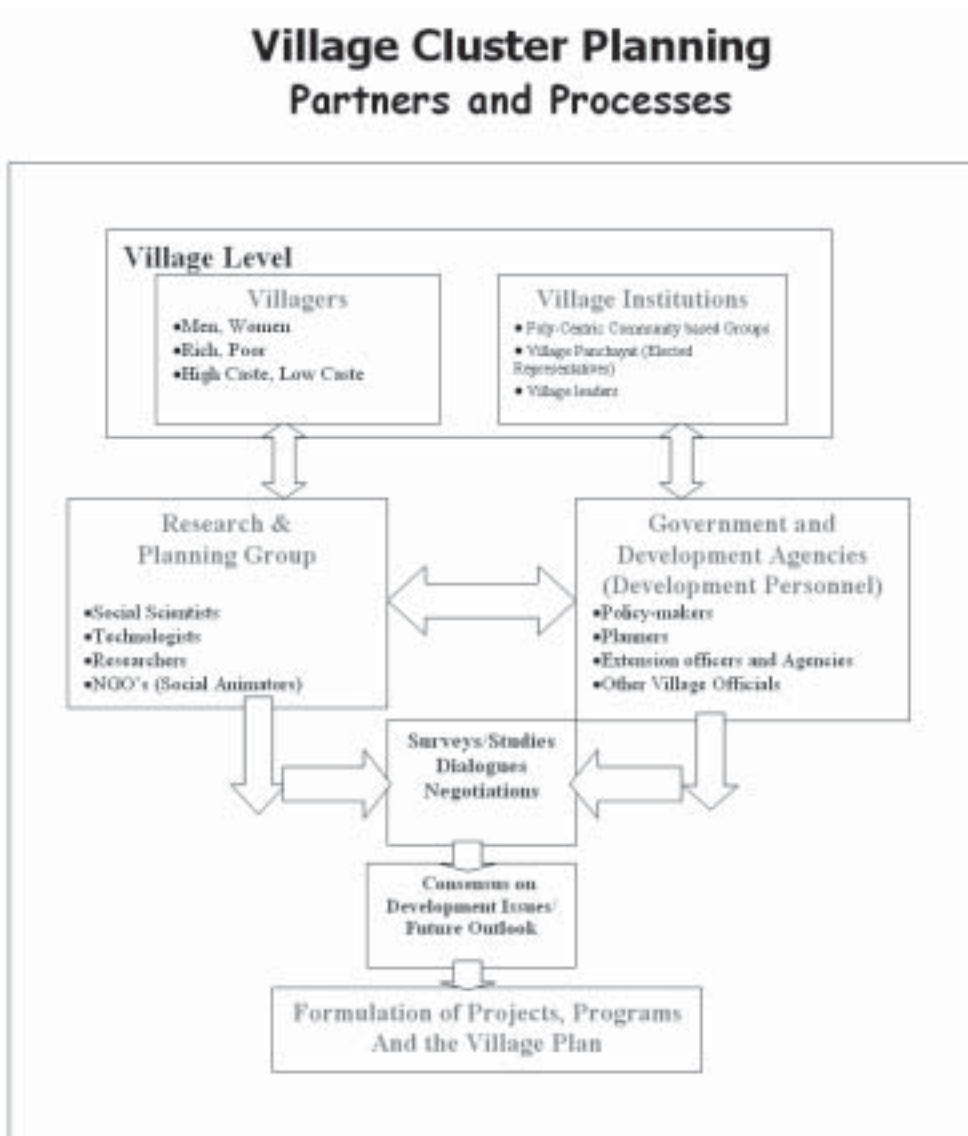


Figure 1 11

that understanding the village as a part of rural neighbourhood assumes importance in planning for development. This new concept of rural development can be translated into action only through 'social animators' (committed NGO's) and 'change agents' (researchers) joining hands with local bureaucracy / technocracy and local people and their institutions. It has to be seen as a joint endeavour of various "Partners in Progress", with clear goals. (Fig. 1)

## **V. The Delineation of Village Clusters**

The first initiating step for creating “Inclusive Socio-economic Development in the Rural Areas” would be the delineation of ‘Village Clusters (VCs)’ as the grassroot level units for rural planning and development. The ideal rural planning units would be the “Cohesive Rural Community”, which can be delineated by taking into account the social, economic and spatial inter-relationships, as well as the power structure of the community. The Village Clusters (VCs) are thus envisaged as ‘Community of Interest Areas (CIAs)’, in which people’s association and social contacts will be of a voluntary nature, with people being drawn together by common interests in economic affairs, trade, social interests for recreation or religion etc. The focal point for each ‘Community of Interest Area (CIAs)’ will be a ‘central place’ of viable population size, already performing some area-wide functions such as, school services, medical services, retail services, social & recreational services, business services and transport services. In order to delineate the hinterland of the selected central place, the analysis could proceed both from quantitative data available from secondary sources (e.g. for education and medical services), and combining this with enquiries made in the surrounding villages, so as to obtain a correct knowledge of those rural settlements, which customarily obtained a particular service from the given central place. Such investigations, coupled with the local knowledge of the relative “pulls” of the central places and the transport orientation and consumer travel patterns, will help to determine the hinterland of the selected central places. Mapping of “Desire Lines” for selected services in the rural areas may also be useful. With such methods, decisions about the central places and their hinterlands could be taken with a reasonable degree of accuracy.

Some of the studies made in micro-level planning in our country have concluded that a viable Village Cluster, which would be the lowest area level unit for planning and development, may cover 5 – 6 contiguous villages, having a distance span of 4 – 6 kms and with a total population of about 8,000 – 10,000. One of our important Committees on Panchayati Raj, which studied the optimum size of the rural unit for planning and development has also concluded that “a large size of rural unit should be appropriate for the villager’s own interest for input supplies and provision of services like hospitals and schools, ware-housing facilities, availability of higher order technical

services and a host of other inter-related functions, which forms part of the design of rural life” (Asok Mehta Committee, 1978).<sup>4</sup>

## **VI. PURA in its Wider Context**

The case for Village Clusters (VCs) as grassroots level units for planning and development has been made in the previous paragraphs. The VC is only a structural component of rural development. We may now consider as to how to make it a really ‘functional unit’, surging with dynamism and activities. In the ‘structural plan’ that has been unfolded with the ‘central place’ as the ‘hub’ or ‘node’, and with the constituent villages as the different ‘spokes’, dynamism has to be infused through various human activities. Here comes the PURA concept to our aid, as a tool to infuse the ‘nodes’, with various forms of ‘connectivities’, ‘flows’, and ‘iterative interactions’.

‘Nodes’ are ‘Nodal/Focal’ points, which are endowed with a certain minimum threshold

of population, infrastructure and services, and which have the potential to propel activities relevant to development and radiate development impulses to surrounding villages.

The four critical ‘connectivities’ to induce development are: (i) Physical Connectivity or road and transport and power connectivity to bridge distances; (ii) Electronic Connectivity to increase communication through media and digital opportunities; (iii) Knowledge Connectivity through education and imparting of skills and extension services to provide information, technology, and increased understanding; and (iv) Market Connectivity to link rural products to markets. The inadequate presence of these connectivities have been seen as the “major irritants”, or obstacles to development in our rural areas and their removal is considered vital for rural transformation.

Simply providing connectivities will not do. They should be rendered dynamic through ‘flows’, which have to be consciously induced in four directions viz. vertical, downward, horizontal, and circular. The ‘Vertical Flows’ will provide bottom-up connectivity to higher order centres of activity for processing of commodities produced in primary villages and information on local needs and preferences, area priorities, targets, local problems and constraints. The ‘Downward or Top-down Flows’ will provide macro-micro linkages and information flows relating to policies, priorities, targets, guidelines, budgetary and technical support. ‘Horizontal Flows’ will establish inter and intra community information flows and interactions. ‘Circular Flows’ will enhance the recycling-ratio within the villages, adding income to the village and bringing about a circular movement of commodities from the primary villages to their processing centres and the return movement of finished products to consumer centres.

‘Interactions’ constitute the vital component of this dynamic system and is closely related to both electronic connectivity and knowledge connectivity. It involves (a) the interaction of the people’s institutions with government’s institutions; (b) the interaction of people, as individuals, with their own institutions, like the Village Panchayat and Community-Based Organizations (CBO’s); and (c) people to people informal interactions through their social organizations.

Thus, the planning intervention envisaged as “Cluster Development” and sought to be operationalized here through the nodes, connectivities, flows, and interactions, in space will ensure participatory development and enable bridging the rural-urban gap, providing urban amenities in rural areas (PURA) and enhancing the quality of life and livelihood opportunities for the rural people.

## **VII. The Operating Vision, Tactics and Planning**

“Where there is no vision, the people perish” is a well-known axiom. It is only with a clear operating vision of objectives, thrusts, tactics, and programmatic interventions that any village cluster (VC) can hope to meet its ‘tryst with destiny’. Initially such a vision will never be totally explicit. It is latent, as a community’s attitude towards itself and its aspirations are not easily visible. With iterative interaction with different sections of the community, however, this can be discovered with some clarity. With the modern tools of analyses, the vision that is latent could be objectified.

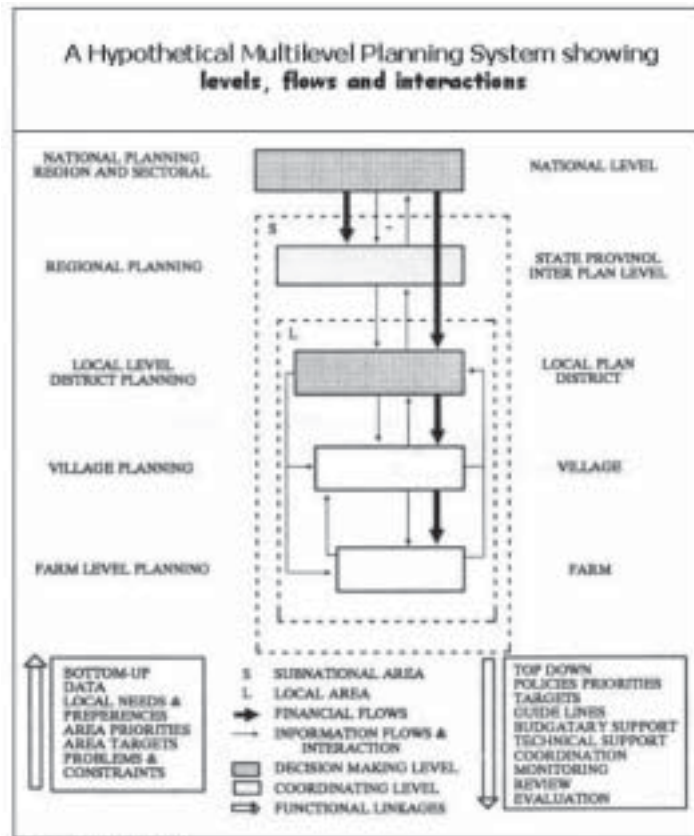


Figure 2

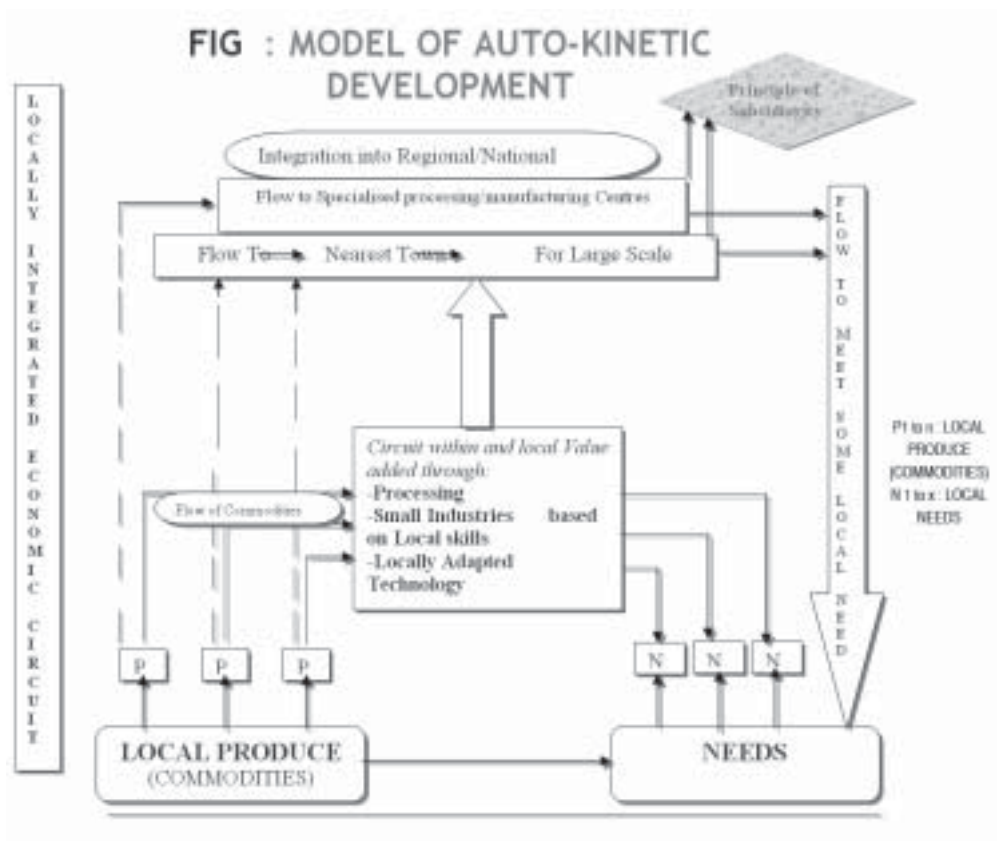
## TACTICAL PLANNING

The discussion on 'Nodes', 'Connectivities', 'flows' and 'Interactions' presented in the fore-going paragraphs relate to the rebuilding of fundamental community structures for the Holistic Village Cluster Development Planning in a multilevel framework (Fig. 2). They provide a broad framework for tactical planning i.e. for developing the tactics required to shape the destiny of the village. Thus tactical planning will describe and rationally organize the practical actions required for socio-economic change in the rural areas. The major tactical areas representing the 'overarching tasks' to be accomplished include:

- (i) Creating an economically viable agricultural and industrial base for the village on the lines of an Auto-Kinetic Model of Development (Fig. 3). By auto-kinetic development, we mean a process by which the auto-centric and auto-dynamic forces of development can be unleashed, which will release the inner urges, potentials and energies inherent in the rural community. It is a process of engineering the overall development of productive forces, with the objective of better satisfying the basic livelihood and the material needs of the rural population, based as far as possible on a more intensive utilization of

local resources, by means of locally adapted and locally controllable, labour-intensive and small-scale technologies. It is the same as the Gandhian concept of Village Swaraj or “Development from within”, with the capillary mechanisms in place, but points to a definite method for augmenting rural incomes.

The auto-kinetic development process rests on the hierarchic principle of subsidiarity. That is, we seek to establish processing/manufacturing units at higher level, only when the existing technologies and skills do not allow these to be performed in a satisfactory fashion and at a justifiable cost in the lower spatial level. In the auto-kinetic development approach, the basic objective of achieving the full development of the natural resources and human skills available in the villages can be secured only by establishing “locally integrated economic circuits”.



The integrated economic circuit concept implies several other ideas such as engineering circular effects, chain effects and recycling the primary produce of the village into secondary lines of production. The Recycling Ratio is a measure of the extent of rural industrialization. Application of these concepts may lead to specialization and in some areas even to the establishment of a “territorial production complex”.

- (II) Guarding the Basic physical well-being of the village society by ensuring food and nutrition security, public health and sanitation and providing health care.
- (III) Developing functional life skills, including upgrading of basic practical literacy skills at all age levels and providing practical training in marketable business and crafts and providing access to agricultural services including inputs and markets.
- (IV) Another tactical arena would be breaking the isolation of the village and establishing external support relations. This could be established through fostering the necessary institutional relations with the Public and Private sectors and adapting the develop-

**Table-1**  
**Holistic Village Cluster Development Project**  
*Operating Vision*

Objectives (Broad Groups)	Major Thrusts	Programmatic Interventions
Community Sustenance (upgrading the economic foundations of village life)	1. Agri-Production Complex	Production and productivity increase, Transportation, Marketing & credit Linkages, product diversification
	2. Food and Nutrition Security	Grain Golas; and Effective PDS; Livestock/Poultry/Horticulture development
	3. Full Employment	SME's through Integrated Economic Circuit
Habitat Improvement	4. Village Reconstruction & provision of basic amenities	Housing rehabilitation, Public utilities and facilities, Power, communication and transport systems
Sustainable Development	5. Ecodevelopment (Biovillage)- Promoting conservation and job-led growth opportunities.	Land & Water Management; biodiversity conservation
Institutional Support	6. Poly-centric Planning and Management Institutions	Village Planning Forum, Village Skill Development Centre, Village Knowledge and Communication Centre Cooperatives, User Groups, And CBO's.
Social Awakening	7. Social Rebuilding (through social animators)	Training and education for social effectivity, Literacy training, Training for women/youth, Land Army, Barefoot Doctors/Engineers /Technologists etc.

ment programmes initiated by the government, to suit the local specificities and needs, forging extended business contacts, e.g. for securing bank loans to fund local projects and promoting the village public image.

- (V) Leveraging Information and Communication Technology (ICT) is one of the major tactics for transforming the village into a knowledge-based society. This would call for establishing a “Knowledge Communication Centre (KCC)” and training the rural youth in computer literacy. In this manner, agricultural information for precision farming from extension agencies and price signals from neighbouring market centers could be accessed by the rural community. The ‘Hub & Spoke Model’ for a knowledge communication centre is illustratively indicated in Fig. 4.

The arching dimensions of the operating vision may be visualized in five broad groups viz. community sustenance; habitat improvement; sustainable development; institutional support; and social awakening. Each group has been further elaborated to indicate the major thrusts and further detailed into ‘enabling programmatic interventions’, for actuating the ‘Vision’. These are outlined in Table -1, which illustrates in a nutshell the planning framework for the study.

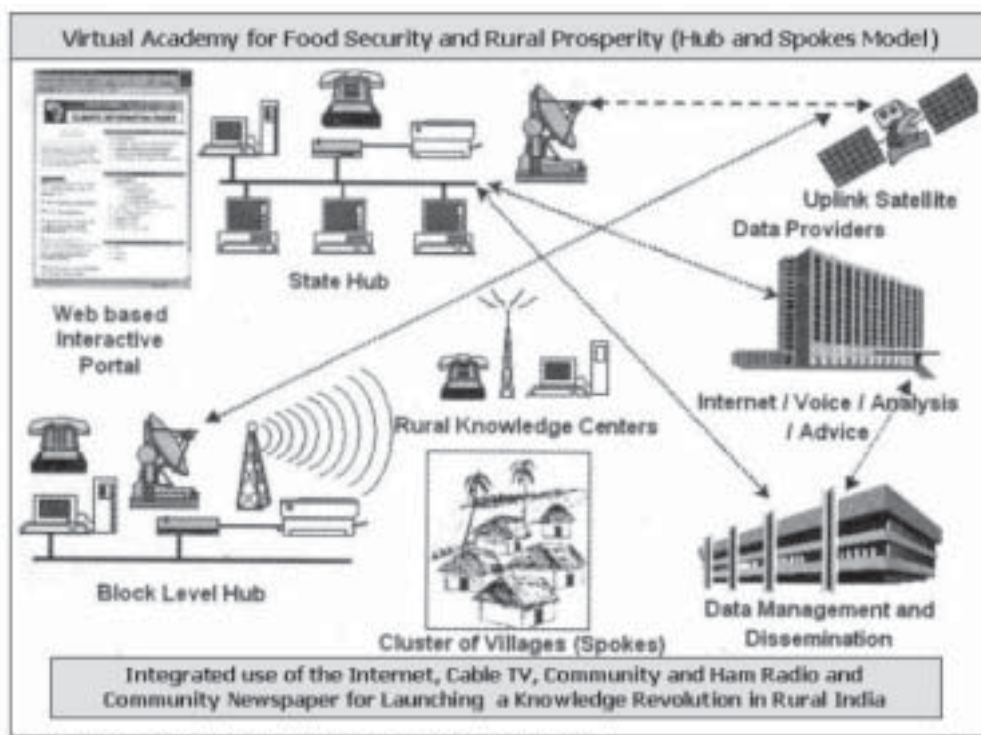
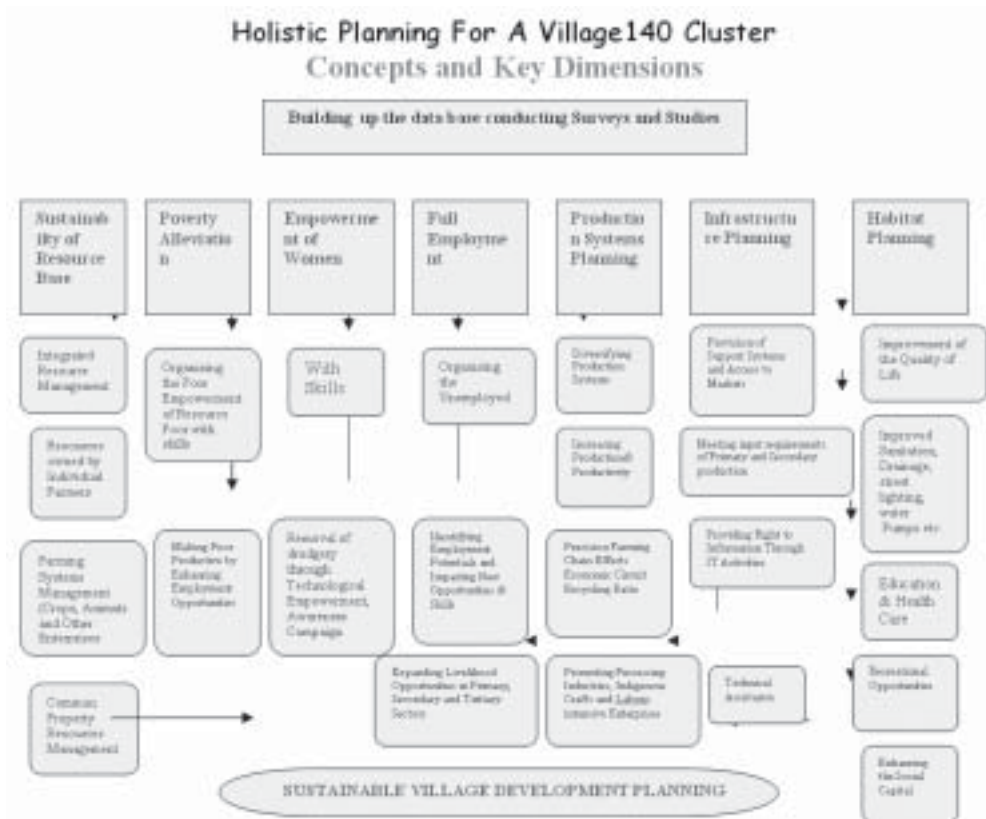


Figure 4



## PROGRAMME CONTENT

Successful implementation of the Holistic Village Cluster Development strategy requires complex decentralized matrix structures, with permanent mechanisms for vertical and lateral integration, a combination of specialist and generalist skills, institutional leadership, social intervention capability and systems management. The methodology and programme content would include the building up of the databases for decision-making through secondary and primary surveys and selected studies conducted by using PRA methods. A seven-fold programmatic design is advocated which will aim at (i) Ensuring Sustainability of Resource Base (ii) Poverty Alleviation (iii) Empowerment of Women (iv) Full Employment (v) Production Systems Planning (vi) Infrastructure Planning and (vii) Habitat Planning. These are further elaborated in the accompanying Flow Chart (Fig. 5). The Bhoovigyan Vikas Foundation hopes to seek to translate the operating vision elucidated in this paper into a few pilot projects in different typological areas.

The operating vision for rural development outlined in this paper and many of its underlying concepts bear a close imprint of Mahatma Gandhi's vision for the reclaiming of the rural villages across our country.

**References:**

1. Sundaram, K.V. 'Service Centres and community of interest Areas: A Case Study of Rural Delhi' in *Urban and Regional Planning In India*, Vikas Publishing House, New Delhi, 1977. Reprinted in 'The Trodden Path - Essays in Regional and Micro-level Planning, Anamaya Publishers, F-230, Lado Sarai, New Delhi, 2004.
2. Report of the Working Group on Block Level Planning, Government of India, Planning Commission, 1978.
3. Sundaram, K.V. "Spatial Planning for a Tribal Region" in *Urban and Regional Planning in India*, Vikas Publishing House, New Delhi, 1977.
4. Report of the Committee on Panchayati Raj Institutions, Government of India, Ministry of Agriculture and Irrigation, New Delhi, August 1978.
5. Misra, R.P., Sundaram, K.V. & Rao, V.L.S. Prakasa, "Regional Development Planning in India : A New Strategy", Vikas Publishing House, New Delhi, 1977.
6. Sundaram, K.V. "Decentralized Multilevel Planning : Principles and Practice (Asian and African Experiences)", Concept Publishing Company, New Delhi, 1997.

