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Total Rural Development (TRD)—The TRD Project Rationale

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I N D E X

1	BACKGROUND	3
2	GOALS AND OBJECTIVES	4
3	EXTRINSIC PROBLEM DEFINITION.....	4
4.1	Problems in rural areas	5
4.2	Education—the central problem	6
4.3	Lack of sustainable livelihoods	6
4.4	Analogy with TQM and OOP	6
4.5	Awareness of environmental protection.....	8
4.6	Transformation of morality and values	9

Keywords: rural development, knowledge, morality, public-private partnerships, asset-based, market creation, information, communications, sustainable livelihoods, education, appropriate technology, paradigm shift, object orientation, modeling.

TRD Project Implementation Proposal:
Rural Convergence Program (RCP)

Name of lead institution/organisation: The TRD Group

Project Title: *Total Rural Development (TRD)—A New Paradigm for Sustainability for a Target Population of about 350,000 People in a Global Village-Based Community*

Location: The Global Village

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Project partners: *coalition of Moral Forces for Sustainability (cMFS)*

Sankalpa Trust, Calcutta, India (*Lead Partner*)

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Themes addressed in the TRD Project Implementation Proposal:

The *primary goal* of this project is to develop a ‘TRD’ model for the ‘global’ villager (see Footnote #2), primarily to obtain sustainable livelihoods, while preserving Mother Nature for future generations.

A *secondary goal* is to conduct a series of seminars in the first year, which will help to clarify the issues, whilst strengthening the ‘Public-Private Partnerships’ during implementation of the project.

The *objectives* of the project will be to develop a participatory approach for empowering the target beneficiaries in the target community, in order to: (a) overcome local barriers to socio-economic development through Public-Private Partnerships (PPP), using knowledge-based products and services as tools for empowerment; (b) use process oriented and scientific approaches for community building; (c) adopt a reusable and modular structure for a software driven approach for realizing the change processes and (d) promote the growth of ethics and morality throughout the program.

Priority areas addressed by the TRD Project Implementation Proposal:

- Through Public-Private Partnerships (PPP), provide knowledge-based and IT-enabled services to villages for promoting sustainable livelihoods and education, using an asset-based and market creation approach that will focus in six areas comprising (a) Education and Livelihoods; (b) Health; (c) Agriculture and Environment; (d) Energy; (e) Shelter and (f) Advanced Technologies;
- Adopt ‘process oriented’ and ‘object oriented’ approaches for the delivery mechanism of the change management processes, which are humanistic, grounded in scientific management processes, are reusable and more stable over time;
- Transformation in morality and human values of the target rural community.

Estimated Project Cost: Rs. 635.8 million [*circa US\$ 16 million @ Rs 40 to \$1*]

Outline of the ‘Rural Convergence Program’ in the Proposal:

Build and operate an RCP Secretariat, which will coordinate the asset-based RCP programs and activities of a series of Information & Communications Technologies (ICT)-based facilities and resources that can deliver knowledge-based products and services to the targeted 350,000 beneficiaries, in order to address the priority areas that have been summarized above.

1 BACKGROUND

Several trillions of dollars have been spent globally to reduce poverty, but governments and change agents everywhere—with the exception of a few model examples—have by and large failed to empower the rural, indigent people and to attack the root cause of poverty: absence of livelihoods opportunities, education and access to resources.

We believe that this situation can be addressed, in part, by **adopting a holistic, asset-based and market creation approach for establishing ‘Public-Private Partnerships’ (PPP)**. These platforms for PPP will provide (a) rural communities with opportunities for sustainable livelihoods and education with an emphasis on health, shelter and energy security; and (b) enable different stakeholders in society to contribute their might towards accelerated rural development. Knowledge-based IT-enabled products and services will be the vehicles for achieving these results.

Another part of the solution is analogous to the paradigm shifts that have already taken place in industry and commerce on the one hand, and the knowledge industry on the other. In both instances, the essentially ‘hierarchical’ and ‘procedural’ approaches in traditional systems have been displaced by more **‘process oriented’ and ‘object oriented’ approaches** that are humanistic, grounded in scientific management processes, reusable and more stable over time. When applied to the delivery mechanism for change management in the present project, these modular approaches lead to optimal solutions that require less repetitious work. They improve our ability not only to model and control complexity, but also to make complicated systems more understandable and maintainable.

Finally, we address the ‘soft’ issue of transformation of morality and human values for all stakeholders in the project, which will reduce greed and self-interest on the one hand and promote the growth of an ethics and morality of self-development, on the other. In this project, we shall affirm a core empirical belief, that **‘the essence of sustainability is morality’** ^[2].

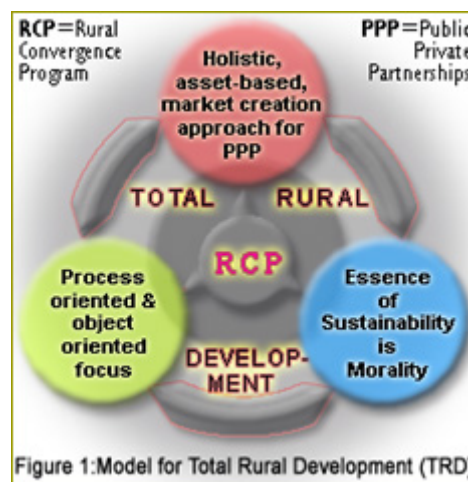


Figure 1: Model for Total Rural Development (TRD)

We believe that a **judicious conjunction of the three preceding highlighted elements** in our target community—using Mother Nature’s ‘hexagonal’ diamond lattice for developing the structure of a reusable model for the convergence of a number of rural development paradigms ^[1]—will result in an economically strong rural community that is respectful of its environment and is also morally engaged. The vehicle for achieving this total transformation is the **‘Rural Convergence Program’(RCP)**, which leverages (a) PPP as a means for rural communities to maximize their creativity and productivity, while minimizing their negative environmental impact; (b) process oriented and object oriented approaches for scientific change management, and (c) transformation of morality and values of the stakeholders.

The RCP is therefore both a model and a tool that will be necessary to crystallize the entirely new paradigm for **Total Rural Development (TRD)**, which is the goal of this project.

The project shall run for **seven years** and impact a target population of about **350,000 beneficiaries** in the target community. The ‘present value’ budgetary estimate of the project is **Rs. 63.6 Crore (Rs. 635.8 million)** [circa **US\$ 16 million @ Rs 40 to \$1**]. This translates to an allocation of about **Rs. 1,817 [US\$ 45.41]** per beneficiary over the seven year period, or **Rs. 260 [US\$ 6.49]** per year per beneficiary ... a small price to pay for the end of rural poverty as we have known it.

At the end of the seven year period, it is believed that the **TRD Group** would be empowered by the assets that have been generated and the steady stream of revenues from the various asset-based and market creation approaches—from the present TRD Project—to launch the next TRD Project, without any further grants or external financial inputs—*giving rise to the vision of TRD in perpetuity.*

2 GOALS AND OBJECTIVES

The attainment of sustainable livelihoods for all rural people, while preserving Mother Nature for future generations are important twin objectives of the RCP.

The *primary goal* of this project is to develop a model for ‘Total Rural Development’ that will provide for the (a) socio-economic empowerment; (b) environmental safety and (c) transformation of values of the ‘global’ villager, which can be replicated anywhere.

A *secondary goal* is to conduct a series of seminars in the first year, which will help to clarify the issues for TRD, whilst strengthening the ‘Public-Private Partnerships’ of the ongoing project.

The *objectives* of the project will be to develop a participatory approach for the rural people in the target community, in order to empower the target beneficiaries to:

- (a) Overcome local barriers to socio-economic development using an asset-based and market creation approach through PPP, with the help of knowledge-based products and services as tools for social empowerment;
- (b) Use these assets to provide for the sustainability of the RCP at the end of the seven-year program duration;
- (c) Use process oriented and scientific approaches for community building;
- (d) Adopt a reusable and modular structure for a software driven approach for realizing the change processes—which is also object oriented, in the sense that development modules may be replicated across state and national boundaries—as the development paradigm is based on universal human needs for prosperity and the pursuit of happiness; and
- (e) Promote the growth of ethics and morality throughout the program, which is inclusive, in the sense that everyone can participate—community members (children, women and men), local administration, education and academia, commercial and business interests, media, NGOs, governmental organizations and the change-agents themselves.

3 EXTRINSIC PROBLEM DEFINITION

It is well known that it is the lack of resources in village-based communities that mainly impedes sustainable development. The RCP attempts to mitigate this problem by developing a ‘global’ solution for this conundrum.

Experience over the past sixty years indicates that generally in India today—and in almost all village-based communities in developing economies all over the world—we already have most of the concepts, technologies, products and processes to transform the situation. Thus we see ‘small oases of development’ created by government, non-governmental (NGO) or industry initiatives in the ‘vast desert of underdevelopment’. Simultaneously, there are large governmental efforts that are spread too thinly because of political compulsions. There is both a mental block and a lack of facilitating mechanisms to enable different stakeholders in rural societies to work together effectively and efficiently. Government, academia, NGOs, industry and others tend to take up independent initiatives with marginal interactions among them. As a result, each one is caught in a trap of its institutional constraints.

With very few exceptions, **Industry** finds that it cannot really build the local institutions that are essential to carry on rural development initiatives in the long term. *Consequently, their efforts tend to become philanthropic and often patronizing.* At the same time, they recognize the latent markets in rural India and would like to do business and provide their products and services at a competitive and affordable price. **Financial institutions** find it especially difficult to locate ‘bankable’ rural development projects and move into rural India only due to pressure from regulatory institutions even though aware of untapped potentials.

The **Government of India**, on the other hand, spends over Rs.20,000 Crores on various rural development activities each year, and yet it is grappling to find the desirable impacts. *A major problem that has persisted with successive government formations in India to eliminate rural poverty is that the focus has been*

on the largely successful formulation of government policy and the subsequent publicity to popularize these policies, with perhaps less effective and efficient programs for measurement and evaluation to ensure proper control during the implementation of those policies at the grassroots level—which really translates to the age-old problem of failure to eliminate corruption and the lack of accountability in government programs. Even with all the decentralization and participation efforts through *Panchayati Raj* institutions, rural community management and self-help initiatives, the Government is still seen as a grant and infrastructure provider, rather than as a facilitator. Most rural communities still expect government to provide for all their needs and aspirations.

The **Non-Governmental Organizations (NGOs)** are slightly better off at mobilizing and building up community ownership and responsibility for processes through participatory practices. However, they are often unable to find the investments and other technological and management resources that are required to take any village-based initiative to a meaningful scale and to its logical conclusion. Also, rural communities—such as vegetable producers and fisher folk, who have to make distress sales all the time at a fraction of the fair, market price, as they do not have access to refrigeration to prolong the life of their produce and catch—are generally exploited by middlemen, who capitalize on their vulnerability, as many are unable to find ready markets for their diverse range of products and services. Scientific and academic institutions find it difficult to experiment with their innovative concepts in rural India due to lack of an institutional base. Some NGOs are plagued by accusations of being more self-serving than addressing the higher principles on which they were formed.

A careful analysis of the current situation indicates that the constraints or bottlenecks of one type of institutional stakeholder are, in reality, the strengths of another. While the government has the reach and ability to make initial public investments; industry has the products, services and ability to garner private entrepreneurship and investments. NGOs have the capability to mobilize local communities and also to adapt products and services such that they meaningfully reach the ‘last mile’. Finally, the innovation capacity of the scientific and academic community is essential to foresee and design for current and future needs ^[2].

The **crux of the extrinsic problems for sustainable rural development** may therefore be summarized as follows:

- a) The inability to access resources, to locate and utilize appropriate technologies and to access regenerative sources of information hinders the village-based community’s capacity for mobilizing crucial resources and rising out of poverty;
- b) The institutional mechanisms for meaningful cooperation are nonexistent;
- c) There is an urgent need to establish platforms for Public-Private Partnerships¹ (PPP) where different stakeholders in society are able to come together and collaborate with their rural development partners, for economic and sustainable development.

4 INTRINSIC PROBLEM DEFINITION

We must also analyze the intrinsic problems faced by the ‘global villager’², to completely map the factors that impede sustainable development in the villages.

4.1 Problems in rural areas

The ten most frequently quoted intrinsic problem areas for the ‘global villager’ are illustrated in Figure 2. This pictorial depiction—graphically identified in a gear train—emphasizes the inter-relatedness and the

¹ A variation of privatization in which elements of a service previously run solely by the public sector are provided through a partnership between the government and one or more social/NGO or private sector organizations. Unlike a full privatization scheme, in which the new venture is expected to function as a private business, the government continues to participate in some way.

² The term ‘global villager’ is not limited or provincial in scope; it has attributes that can be applied to all villagers on this Earth, in general. It is at variance with Marshall McLuhan’s characterization of the ‘Global Village’, which describes how electronic mass media collapses space and time barriers in human communication, enabling people to interact and live on a global scale.

problems of meshing, in each problem area. It also suggests the reason(s) why many rural development programs are not sustainable, as the gear train inevitably grinds to a halt when this intricate web of meshes becomes dislocated. In order for the whole to be moving forward, every ‘gear’ has to mesh properly and contribute to sustainable rural development.

The figure also underscores the need for a holistic³, multi-sector approach, and why single-sector development programs have failed in the past; it also suggests that (a) ‘Education’—and more specifically ‘primary education’—or the lack of it, is the central problem; and (b) The socio-economic status of villagers—stemming from the lack of ‘Sustainable Livelihoods’—is universal: a super ordinate problem in any rural development program.

4.2 Education—the central problem

‘Education’—and more specifically ‘primary education’—or the lack of it, is the central problem. Illiteracy is an indicator of human insecurity. According to Professor Amartya Sen⁴, primary education advances human security by enhancing political participation, economic opportunity and human capabilities. Education also generates self-confidence, reduces fear, enables risk-taking and supports an orientation towards the future.

Professor Sen believes that no economic development is possible without compulsory universal education. He writes: *“The remarkable neglect of elementary education in India is all the more striking given the widespread recognition, in the contemporary world, of the importance of basic education for economic development. Somehow the educational aspects of economic development have continued to be out of the main focus in our country”*.^[10]

Good education endows people with better coping capabilities to grapple with crises. There are multiple linkages between education and human security: (a) education provides greater employment security; (b) education enables people to exercise their rights; (c) education empowers the underdog, especially women; and finally, (d) education can socialize children towards tolerance and respect among diverse communities of people.

4.3 Lack of sustainable livelihoods

The endemic causes of rural poverty—such as poor nutrition, lack of energy security and shelter security as well as the general inability of rural communities to build knowledgeable and productive small-scale rural households—primarily stem from a lack of sustainable livelihoods. As a corollary, the absence of these societal necessities also impinges directly on the creation of sustainable livelihoods^[1].

Rural communities therefore need a new sense of direction that could lead towards meaningful “revitalisation” of rural households.

4.4 Analogy with TQM and OOP

There is a close analogy between the proposed paradigm shift in this pilot project for ‘Total Rural Development’ (TRD) with (a) ‘Total Quality Management’ (TQM) for industry and commerce; and (b) Object Oriented Programming (OOP) in Information Technology for software development.

³ Holistic (from *holon*, a Greek word meaning entity)—sometimes spelt ‘wholistic’—relates to or is concerned with wholes or with complete systems rather than with the analysis of, treatment of, or dissection into parts. According to the Oxford English Dictionary, Jan Smuts who coined the term in the early 1920s defined holism as ‘The tendency in nature to form wholes that are greater than the sum of the parts through creative evolution,’ because the ‘system’ adds something in addition. Another term is ‘systems thinking’, which emphasizes the organic or functional relation between parts and the whole.

⁴ ‘You cannot evaluate what’s happening without looking at the people who are on the downside’

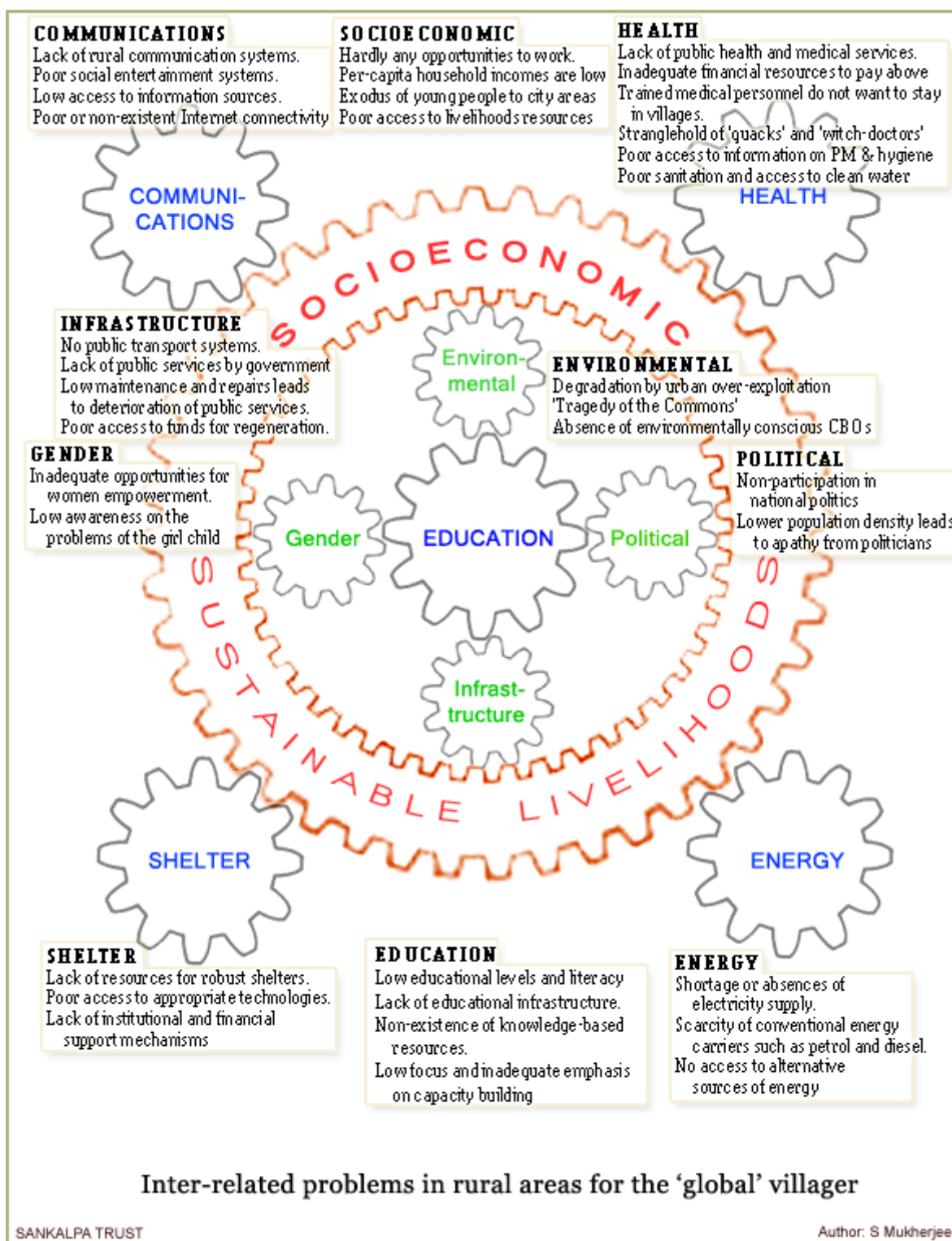


Figure 2: **Problems in rural areas:** The figure dramatizes the impact of 'Sustainable Livelihoods' (SL) on the inter-related problems in rural areas for the 'global villager'. The internal and external gear teeth on the SL contraption exemplify its impact on the major problem areas of 'Communications', 'Shelter' and 'Energy' – with its concomitant impact on 'Health'. On the other hand, 'Education'—more specifically 'primary education'—or the lack of it, is at the center of all problems for the global villager. The attributes comprising 'Environmental', 'Gender Issues', 'Political' and 'Infrastructure' problems result from the inability of the rural people to sue for change, as a result of poor education and knowledge.

Correlating TRD with TQM

TQM has been a global paradigm shift in the consciousness of industry and commerce that started in the 1990s. It replaced hierarchical, top-down management processes with more humanistic, 'horizontal', process oriented and bottom-up management systems, that were also focused in delivering 'quality' to the 'Customer'. Led by the Japanese, companies worldwide realized that the customer was the most important link in the chain! This paradigm shift has brought enormous and visible benefits to consumers and the society in urban areas of India. However, this TQM revolution has completely bypassed the rural areas in India, as its fruits are available only in industry and commerce in the urban centers of the country. Institutional rural development processes are still largely hierarchical, top-down and often treat the 'Villager' as an obstacle or impediment to his or her own progress, however paradoxical that may sound.

In the first and second phases of this project, we intend to test various assumptions and hypotheses on the kind of processes that will be needed for the realization of TRD and its positive impact on 'Villagers', and to do what TQM did for industry and commerce in the cities. We propose to make the 'Villagers' the most important entity in the RCP, around which our rural development processes will be developed; that they are indeed our most important link in the chain; that we need to replace our old hierarchical attitudes towards rural development, with horizontal, 'process oriented' ones. And just as ISO 9000 Standards were a standard bearer for TQM—a global standard by which anyone could measure the ability of an organization to deliver 'quality' to its customer—we believe that our TRD model and RCP will result in the development of a global standard, by which the ability of a rural intervention strategy to deliver holistic benefits to the village community can be measured.

Correlating TRD with OOP

Object Oriented Programming⁵ (OOP) is a natural outgrowth of the human mind's tendency to think in visual metaphors and is therefore a natural way to view and construct models of the world. It results in less repetitious work and has the ability to be strongly modular or structured. Object oriented methods are also more stable over time than other representations and improve our ability not only to control complexity, but also to make complicated systems understandable and maintainable.

In a well-designed object oriented system, it should be possible to (a) implement a systemic change without having to make alterations at other unrelated points in the system; and (b) reduce the overall amount of maintenance required since many problems can be detected and corrected in the design phase.

Just as there has been a paradigm shift in software development from procedural programming to object oriented programming, we therefore propose to initiate a paradigm shift from the *traditional* 'procedural' and 'top-down' rural development regimes to the modern, *object oriented* and 'bottom-up' technique exemplified by the preceding discussion on object orientation. Once 'domain experts' have determined the patterns and objects for the implementation of the RCP model—one that can bring entire communities of indigent people out of poverty—then we may reuse this pattern, globally, without having to reinvent the RCP model and its components every time we visit a new, rural place that needs 'Total Rural Development'.

4.5 Awareness of environmental protection

This project shall promote an awareness of environmental protection, particularly the global villagers' impact on global warming and reduction of 'Green House Gas' (GHG) emissions, as climate change is projected to impact tropical countries more negatively than temperate zones^[25].

For the more than 700 million people in rural India who are dependant on the most climate-sensitive sectors for their livelihoods—agriculture, forests and fisheries—global warming brings declining crop yields, degraded lands, water shortage and ill health^[25], and all of these factors are of central importance in our

⁵ Object Oriented Programming (OOP) is a pattern which enables applications to be developed economically and delivered easily. It permits delegation of specializations, which makes application development more manageable.

proposed ‘New Paradigm’. Unless massive corrective actions are taken immediately—as proposed in our ecological and environment-friendly asset-based and market creation approaches—the people of not only India, *but the whole world*, have strong reasons to be concerned. **And we hope that by creating an environment-friendly and reusable model as proposed in the present project, we would take practical steps that demonstrate viable ways to meet the global need for a fair and effective system of participatory governance—local, national and international—to manage this global problem.**

4.6 Transformation of morality and values

The philosophy of human unity is based on a realization of the necessity for maximum diversity among peoples and nations and leads to a mobilization of human energies and talents towards the development of the full potentials of all individuals, groups and levels of society.

Impact on beneficiary community

The practical result of this philosophical orientation, for the beneficiary community and surrounding villages during forty years of development, has been national and international participation in the development of innovative and exemplary environmental, educational, social and economic structures.

The transformation in the moral stance and values requires a higher approach to development that includes physical structures, life values, mental development, and the realization of the underlying unity of all aspects of life, as expressed throughout the many schools of thought for which Indian culture is best known. Such a moral and educational approach to development constitutes an awareness and respect for life that has been the ideal of all the wisdom traditions of the world. The aim of this project is to give these ideals a practical, material form. By bringing together a wide range of human and material resources in the service of human development, this project of *Total Rural Development* hopes to extend the dynamics of human development outward to the bio-region and eventually to demonstrate a viable model for sustainable development that can be replicated nationally, and indeed globally.

Impact on stakeholders

This project will apply holistic thinking in all facets of its administration and implementation. Training for all project staff members—from the village field workers, to supervisors, to administrators and project holders—will draw out through their educational experiences the insights that are fundamental to scientific, process- and object-oriented methods: that each participant and structure is a part of the several *holons* that are all interlinked within a greater whole. Local knowledge will be recognized and reinforced, so as to emphasize the natural honesty, sharing and cooperation that is innate to the village community.

At the same time, a code of conduct based on global values for inner development will be formulated at the beginning and progressively refined as it is enforced in the first phase of the project. Specifically, importance and time will be given to refining the communication patterns between the stakeholders of this pilot project—including the external partners—so that everyone perceives the *whole* project and appreciates the problems faced by the rest of the participants in this process oriented and non-hierarchical organizational structure.

Monitoring and evaluation programs will address not only target achievements, but also group processes and the personal self-growth of all participants. The progressive improvements in all spheres—physical, organizational, conceptual—will be recorded, tested and developed into a working manual for the project.