Gram Vikas is a rural development organization working with poor and marginalized communities, especially the adivasi and dalits, of Orissa. The mission of Gram Vikas is to promote processes which are sustainable, socially inclusive and gender equitable, to enable critical masses of poor and marginalized rural people or communities to achieve a dignified quality of life. Interventions of Gram Vikas are directed at energizing entire village/habitation, and are driven by the involvement of the entire community in planning, implementation and monitoring. The integrated approach to development included:

- Housing and habitat development: Disaster proof housing, sanitation and water supply systems and community infrastructure including schools, grain banks, roads, drainage and alternative energy production.
- Livelihood and food security: Diversification of livelihood options through skill and capacity building based on locally available natural and human resources, formation of self help groups for micro credit and micro enterprises and market linkages.
- Natural resource management: Watershed management, involving conservation and development of land, water and forest resource so as to mitigate the effects of droughts.
- Education: Village based pre-schools and primary schools, residential schools for adivasi children and project based education resource centers.
- Health: Curative and preventive health services imbibing traditional knowledge in medicines and health practices.

**Housing and Habitat Development**
Gram Vikas rejected the low-cost quality approach towards housing as in different government schemes like ITDA or Indira Awas Yojana, which are mainly one-room shelters. In the habitat scheme promoted by Gram Vikas, every family habitation has a house of at least 45 sq. m. with two rooms, a kitchen cum dining space and verandah, separate toilet and bathing room and supply of running water in all houses. The habitat also includes other infrastructure such as a multipurpose community hall, creche, a school, appropriate shelter for livestock, grain stores, roads and drains, and appropriate sources of energy especially in places where there is no electricity.

Habitat development involved the entire community coming together for both individual and collective gains. Community effort is manifested in baking bricks for the houses, collecting sand from the river beds, collecting and breaking stones, collecting wood for doors and windows and collectively contributing all unskilled labour during construction. All households share the workload, which enables each and every family to devote requisite time to meet their other basic requirements.

To initiate the programme, field supervisors of Gram Vikas mobilizes the village representatives, collects applications, conduct village level meetings to assess the status of the village, resources available and interest to work collectively. To mark their intent to build a house, each family is required to raise an initial deposit of Rs.3,000 to Rs.5,000. In addition, each family must contribute Rs.1,000 to a village corpus fund, which is placed in a fixed deposit, the interest from which is used to extend water supply and sanitation facilities to new families in the village in the future.

House designs and site layout designs are then discussed with the families. A contract indicating the time frame for construction, division of responsibilities, etc., is drawn up on the basis of negotiations with the community, after which the construction of the houses started collectively.

Capacity Building

During the course of infrastructure development in the villages, local youth (men and women) are trained under expert guidance in construction skills, such as masonry, wire-bending, stone dressing, carpentry, plumbing, electrical fittings, painting, etc. Once trained, these youth find gainful employment locally and are not forced to migrate. In most villages, houses
are constructed in rows to allow for resource and space efficiency. Gram Vikas arranges for the collective purchase of raw materials such as steel, cement, galvanized corrugated iron sheets, etc., and also organizes masons for the construction of houses.

All families participate actively in the construction process. The construction process is managed and monitored locally by the village committee. The loan is released in installments at various stages, such as plinth, sill level, lintel level, casting of the roof, etc. Generally the construction has to be completed within six months.

**Cost of houses and financing**

The housing model adopted by Gram Vikas, using cost-effective technologies, presently cost about Rs.60,000 to Rs.70,000. Gram Vikas provides loans and technical support for construction. The loan accessed from HDFC is out of a line of credit made available by KfW of Germany. Gram Vikas has taken the complete responsibility for the loans in regard to utilization and repayments. During the course of construction, people contribute substantial amount of time. The repayment period is fifteen years. Annual repayment instalments for a loan of Rs.30,000 worked out to Rs.2,000.

**Brick Making Units – VSBK Technology**

The Vertical Shaft Brick Kiln (VSBK) manufacturing technology was adopted by Gram Vikas in 1997. Originating in China in the 1960s, the VSBK gradually evolved as an energy-efficient technology particularly suited to small-scale, non-mechanized and accessible to rural entrepreneurs. The VSBK is a continuous firing process in which bricks loaded at the top of a vertical shaft pass downward through a static firing zone to emerge, after cooling, at the bottom of the shaft. It is characterized as an updraft system – the draft of air rising from the base of the shaft cools the fired bricks, and is itself warmed before reaching the firing zone. This hot air, together with the products of combustion, then rises to preheat the green bricks passing down from the top, before they are fired.

The ‘all or none’ approach adopted by Gram Vikas covers every single family in the project village. The peer pressure forces the families to participate in the housing initiative. If all the families do not participate, the unhygienic conditions created by a few non-participating families, could affect other participating families adversely, thus nullifying the positive effect of the programme.
Community Governance

All adult men and women of the village are brought together to form the village general body, which elects an Executive Committee with equal representation of women and men. A village society is formed under the Societies Registration Act, 1860, with all members of the general body as primary members and the members of the Executive Committee as office-bearers. The village society takes responsibility for managing all development activities in the village. This approach emphasizes self-reliance and community governance without depending on external aid.

Water and Sanitation

Gram Vikas launched the Rural Health and Environment Programme (RHEP) in 1992. The main aim of RHEP is providing uninterrupted water supply and dignified sanitation facilities to 100% households in a habitation. In the sanitation programme, toilets and bathing rooms costing Rs.8,600 are jointly financed, with Gram Vikas’ subsidy of Rs.3,000 and people raising the remaining amount by raising local resources and contributing labour. The subsidy goes towards meeting the costs of external materials, typically cement, steel, toilet pan seat, etc.

For water supply, RHEP generally tries to link the people directly with Swajaldhara, the government rural water supply programme, under which cost of the tank and pipe network will be available. Families pay some share of the costs in materials and labour. Gram Vikas contribute the rest. Discretionary funds available with elected representatives are accessed wherever possible. The work involved digging of well, laying of main pipeline and distribution system, construction of overhead tank, etc.

For maintenance, habitations raise a corpus of Rs.1,000 from each family on an average, which is invested in bank deposits. The interest accruals from the corpus are used to extend the same subsidies to new households, ensuring 100% coverage into the future. People also pay a monthly maintenance charge to cover all operational costs from the very first month. These measures ensure that the social infrastructure created will be
sustainable, community-owned and self-managed.

Power Supply

Villages which have not been electrified by the State Electricity Board, Gram Vikas constructed a Biomass Gasifier units and the electricity generated was used for pumping water to overhead tank, 2-3 light points in to individual houses, paddy processing, etc. Each family paid about Rs.50 per month for maintenance.

Impact

Other significant achievements of Gram Vikas have been in the following areas:

- Ousting of money lenders and liquor merchants from villages through support to people’s movements
- Regaining of land, trees, forests and other bonded property
- Regeneration of wastelands by growing timber, fuel, fodder and fruit species wherein Gram Vikas had supported the communities to obtain legal titles over the revenue wastelands
- Setting up of over 54,000 biogas plants under the National Programme for Biogas Development during 1983-1993.
- Gender equity: Equal representation and participation of men and women in community level decision-making and control.
- Successful movement against alcohol.
- Principle of cost sharing in all interventions. Community members share cost of development projects, with social costs being received as donations.

The programme has contributed to the upgrading of houses and community infrastructure, education, nutrition levels, improved sanitation and livelihoods for the families. Community managed water supply and sanitation programme has made the surroundings neat and considerably reduced the incidents of diarrhoea, gastro-enteritis, etc. With improved housing conditions, many villages have developed community shelters, grain banks, and a common working place for women and community livestock sheds. Residents collectively manage the
common land, forest and water bodies in the village leading to improved environmental protection and economic returns. Empowered communities have accessed funds from the government to support the construction of village roads, drains, school buildings, etc. The number of children enrolled for school has increased. Gram Vikas also trains the education facilitator and the expenses towards facilitator’s remuneration, teaching aids and learning materials is met out of the common funds contributed by the villagers. The produce from the kitchen gardens developed by the children is used for their mid-day meal.

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HABITAT DEVELOPMENT AND LIVELIHOOD CREATION – EXPERIENCE OF KUTHAMBANKAM PANCHAYAT-TVSG

A socio-economic transformation leading to housing for all and sustainable livelihood creation was achieved in Kuthambakkam village in Thiruvallur Panchayat of Tamil Nadu, where the village Panchayat joined hands with 'Trust for Village Self Governance' (TVSG), a registered charitable trust founded by Mr. R. Elango, in 1996.

Kuthambakkam Panchayat has 1170 families spread over 7 habitations - Kuthambakkam north, Kuthambakkam centre, Kuthambakkam south, Utkotai, Irulapalayam, Kannada palayam colony and Samatvapuram.

Except 'Kuthambakkam centre' that is largely inhabited by upper caste families, the condition of all other habitations inhabited by Dalits was deplorable. Till 1996, the village had no basic infrastructure of roads, water supply, drainage, and sanitation facilities. In the absence of toilets, open defecation was common practice.

More than 40% of the population lived in huts, typically small dwelling units with area of less than 200 sq.ft. They were constructed with palm leaf thatch as roofing over kuccha temporary mud walls. A small entrance door was the only source of natural ventilation and lighting. Coupled with poor sanitation, lack of domestic hygiene and impermanent source of income, living conditions seemed irrecoverable. There was little hope for the future as majority of the people depended on low and seasonal income from agriculture.

Objectives and Strategies

The Rural Housing and Habitat Programme jointly taken up by the Village Panchayat and TVSG aimed at:
Creating building materials based livelihoods to provide income generation opportunities to the villagers.

Constructing decent, *pucca* houses (permanent) with an estimated cost of Rs. 42,000 per house

Ensuring social harmony

Building local capacities in self-governance and disaster preparedness.

A democratic approach was adopted to understand and address people's needs. While the

Panchayat took a lead in project implementation, TVSG ensured community participation at every stage of the project. The Panchayat mobilized funds from various sources to provide shelter at a cost of Rs. 42000. Of this, the Government contributed Rs.25000 per house. The funding model was largely based on grants. The Swiss Agency for Development and Cooperation (SDC) provided top up funds to the tune of Rs.251akhs for the village and the balance funds to the tune of Rs.10 lakhs were mobilized from community contributions and private donors.

**Stakeholders and Roles**

- Kuthambakkam Panchayat was the principal driver in project conception and implementation. It used the local government as a launching pad for initiating the housing process. The Panchayat turned the housing project into a people's programme. Maintaining a true 'people's programme' approach, it ensured the independence of community throughout the project.

- TVSG supported the Panchayat through 'process design.' It mobilized funds from the Government of India, SDC, private donors and the owners from the community. Mr. R. Elango from TVSG was elected as the Panchayat head in the year 1997 and he ensured the linkage with the Panchayati Raj Institutions.

- The communities actively participated in the programme as it was made to be 'their own', including design of shelter, production of building materials,
labour contribution and maintenance of houses. The material contribution varied from family to family, depending upon the value addition they wanted for their house. For instance, families seeking a larger front sunshade or families wanting a higher plinth extended more contribution.

The Process

Phase I: Understanding people's needs

In 1997, the first positive step was taken by the new Panchayat president. The community was motivated to develop a village development plan with full participation of people in which all needs felt by the community were identified and prioritized. Drinking water and surface drainage ranked first in priority, especially in the Kuthambakkam north and south, which are Dalit hamlets.

Phase II: Fulfilling people's prioritized needs

To resolve the issue of inadequate drinking water, the Panchayat installed a few more bore wells and constructed 3-4 overhead tanks in the village. Cost-effective storm water drains were constructed using waste granite stones to improve surface drainage. Soon after these basic issues were resolved, the panchayat took up construction of internal roads of the village, as lack of such facilities affected the drainage. Internal roads of the village were constructed through the "Namakku Namey" scheme meaning "We for ours", a brainchild of the then Government of Tamil Nadu, which provided 75% of the project cost. The balance 25% of the project cost was met from material contribution and shramdaan (labour contribution) by the communities.

Phase III: Shelter and Social Harmony

While basic infrastructure was being developed in the village, housing was also discussed in all the gram sabha meetings. The Panchayat initiated upgradation of huts and construction of new houses through Government of India's Indira Awas Yojana (IAY) scheme. House construction was used as a tool to promote social harmony. Towards this end, Samatvapuram scheme of the state government was utilized to construct 50 twin houses that were allocated to Dalit and Non Dalit families in a way that every alternate house was occupied by a Dalit family.

Impact
300 families were provided new houses and the number of huts in the village was reduced to about 250. Those living in huts created pressure on the panchayat for upgrading their shelter.

There was a boost in the self-esteem of poor landless farmers who were provided with pucca and decent shelter. Construction activity opened up opportunities for earning money. For instance, locally constituted self-help groups earned their livelihood through production of Compressed Earth Blocks.

TVSG has also helped in strengthening Panchayati Raj Institutions in Kuthambakkam and Tsunami affected areas of Tamil Nadu.

Innovative Features

- The community was not regarded as the 'beneficiary' but as a stakeholder in the entire project. There was a true involvement of the community in decision-making process.
- Individual need and choice in house construction was recognized. Specific building features preferred by individuals such as higher plinth or RCC bands were incorporated into house design.
- Technically viable alternatives were successfully implemented in house construction. For instance, compressed earth blocks were chosen for their cost effectiveness and greater capacity for local income creation as compared to burnt bricks.
- As decided by the community, waste pieces of granite in good shape from nearby industries were used in the foundation of houses.
- To meet the demand for a flat roof, RCC filler slab was used which was later modified to increase cost savings.
- Twin pit toilets were constructed for their time-tested effectiveness. At a later stage, stainless steel covers were introduced in the design to cover the defecation hole so that the toilet also served as a bathroom.

Learning

- Livelihoods take precedence over shelter and habitat, as far as the immediate needs of the community are concerned.
- The need for open space used for cooking and washing utensils should be considered while designing pucca shelter.
The houses under Indira Awas Yojana are too small for the families to live. 200 sq. ft. of living space for a family size of 5-7 is simply impractical.

Earth blocks and other such cost-effective materials are not cheap as commonly expected. Such alternatives are appropriate considering livelihood creation and their impact on the village economy.

Strategy of prioritization and short-listing among the poor for providing shelter is not welcomed by the community.

The model has a strong potential for replication across the country.

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