

basin–South Asia

Regional Knowledge Platform

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Contents

Editorial	
From strengths to initiatives...	2
Techno-Social Integration – an overview	3
Integrating Technical Action with Social Action – The Asuramunda Experience	4
The Strength of Brickworkers – experiences from Eastern Uttar Pradesh	5
Techno-Social Integration for sustainable livelihoods – the journey at Development Alternatives	6
Win-Win Approach in Nepal Brick Industry	7

Techno-Social Integration

From strengths to initiatives...

As enthusiastic students and eager proponents of “**Techno-Social Integration**” (TSI) for initiating sustainable change in the lives of underprivileged communities, we have often been asked, “What’s new about TSI”? The question has never been easy to answer, particularly because the concept itself and the framework for action that it espouses are still evolving. Having said so, there is enough evidence to suggest that altering one’s perspective on socio-economic development processes within communities that are inextricably linked to technology based livelihoods, can lead to significant change in living conditions, relationships at the workplace and overall access to vehicles of empowerment.

Our view of Techno-Social Integration and the potential it holds has its roots in the work done by partners in the India Brick Project within the broad orientation of ‘Social Action’. Exploratory in nature, these initiatives, led by The Energy and Resource Institute (TERI) and its partners in Uttar Pradesh, Gram Vikas in Orissa, Development Alternatives in Madhya Pradesh and MITCON-Damle in Maharashtra, addressed a combination of themes such as traditional knowledge, community, gender, downscaling, local market and ownership. In sharp contrast to the ‘problem-solution’ or ‘need-response’ paradigm within which most development action is conceived, the Techno-Social Integration approach was based on recognition of people’s strengths; emphasis being placed on understanding these and facilitating dialogue to design initiatives in which strengths such as skills and solidarity could be capitalized upon.

For operationalising the TSI approach in the small and micro enterprises, the work was started from two ends: (a) Promoting technological interventions in the target sectors that benefit society with special reference to vulnerable groups and (b) Social interventions in the target sectors to promote dialogue with the artisan community as well as actions that promote “common good” (Activities that benefit the workforce directly). In fact the second point flows from the first

one and in some sense also leads to it. The assumption in the later case is that through capacity building of the workforce a technical dialogue would begin. In other words, a top-down as well as a bottom-up logic comes into play wherein, both the industry and the workforce trust the project team, their credibility and rapport become high and the immediate priorities of the industry including its workforce get addressed. Over the years, practical action in India covering a diverse set of small and micro enterprises and in brick industry in Nepal has helped build a diverse body of experience. It has been quite rewarding for our ‘community of practice’ to find strands of knowledge which can, undoubtedly, be woven into path breaking multi-stakeholder initiatives – with artisan communities at their centre.

In the real world, where state policy and private initiative play a dominant role in shaping the future of civil society, techno-economic feasibility continues to be a primary concern while formulating new ventures. Environmental and social dimensions are seen, in favorable settings, as desirable consequences or, in more contemptuous circumstances, as aspects that need to be ‘managed’. Would it not be possible for governments and industry to conceptualize projects with techno-social feasibility in mind and environmental sustainability being built into the choice of technology. The economic outcomes would, we believe, be easier to deal with than social unrest.

This issue of **basin-SA** Newsletter shares some of the thoughts and actions that have propelled TSI approach to its current level of utility as a framework for action. Needless to say, much more work needs to be done. We invite you to join us on this journey.

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Techno-Social Integration

– an overview

Introduction

Techno-Social Integration (TSI) is a way of understanding and doing. Social change strategies and industrial enterprises need to come together to serve genuine human, community or global needs. Industrial enterprise cannot be a stand alone activity. Managers of such enterprises need to incorporate riders related to energy, environment, conditions of work, wages etc. These are essentially social conditions. For example, effort to promote use of renewable energy resources is in response to both the energy and environment needs of the society whether from the point of view of conservation, climate change or any other. Similarly social change strategies need to have technology as a component among the drivers of change. For social welfare and changes in social relations one needs new technological innovations for a progressive march. If we further elaborate and go into details on how specific social change activities use technology as a critical causal factor and how specific technologies and industries develop in response to human and societal needs, we may see the inter-twining of society and technology from the micro to the macro everywhere and then wonder why there is this need to talk about TSI when it is in fact there all over. Further reflection shows that there are often large scale processes and interests which cause disengagement between society and technology resulting into lack of concern and disregard by practitioners of one for the other. One also finds social activists who simply refuse to recognize technology as one of the important drivers of change. So what we need is greater clarity and greater consciousness of the relationship between technology and society which in concrete terms is the relationship between industrial enterprise and social change processes.

TSI is a well defined approach for achieving both this clarity and the required consciousness. We have been talking about industrial enterprise, but let us note before going further that TSI is equally applicable to Natural Resource Management too, where in fact it is more obvious.

Pro-Poor

TSI is particularly meaningful and useful for the weak and the poor in society. It is a common observation that the poor in the villages who include peasants, artisans and others command a variety of skills and knowledge with regard to nature and natural

processes. Having suffered for generations under social and economic discrimination, they have as if, forgotten to articulate their strengths. Although quick to learn from new experiences and outside agencies, they have been dubbed as 'resistant to change'. They are not resistant to changes which may do them good but they may take longer to be convinced because of historical reasons. TSI is an approach to activate their strengths – skills, knowledge, ability to learn, managerial capacity, ability to build fraternal relations, community orientation etc. TSI provides a way of thinking to construct those situations in which people are able to put their strengths together for a genuine initiative and enterprise.

Pro-Women

Putting society at par with technology and vice-versa through a TSI approach especially proves facilitative for women. Nothing perhaps would serve women better than society recognizing their strengths, their knowledge and skills, their organizational capacity etc. In fact in a certain sense, if we can talk about women's point of view in such situations then it would be of immense support to development of TSI strategy. The components of a TSI strategy mentioned below make the pro-women stance of TSI obvious.

Strategy

Given below are a few components of TSI approach.

1. **Small Scale:** Capital, management, maintenance, innovation and control, everything takes a favourable turn for the poor in small scale enterprises. What we call renewable energy sources are largely also the traditional energy sources. These sources have always been used for dispersed production on small and tiny household scale. Such organization of production became unsuitable and therefore unviable under modern social conditions. Now, with the advent of new technologies for working with renewable energy sources, equipment has again been made available for dispersed small scale production enterprises. TSI therefore recognizes the great importance of new technologies to work with renewable energy sources. No argument perhaps is needed to show how women's strengths and local knowledge are both assets in such a case. Needless to say that a strong learning trajectory is a necessary requirement too.
2. **Local Knowledge:** TSI recognizes the importance of local knowledge and desires that it finds a place in the general knowledge apparatus of enterprise. Enterprises that are not 100% professionally managed and do not function 100% on market terms have a cooperation component built into them. This cooperation owes itself to a variety of factors related to village and community life, however the essential content of the cooperation often relates to local knowledge. It is not always easy to see how local knowledge is an important aspect. This knowledge is shared and not paid for. Very often it is not recognized as a knowledge piece at all. If one gets a villager-entrepreneur to narrate in detail the process that led his enterprise to succeed, one may need to identify the elements of local knowledge that were actually pressed into service to cause success.
3. **Local Market:** National and international markets very often put a pressure on enterprises to separate the social from the economic and the technological. TSI approach suggests the promotion of local markets to resist such a separation. As it is, local markets suit the poor the small scale and women in general. The local market does not have a separate spatial location. One needs to factor it out from the given market. The poor generally carve out a multi-dimensional niche in the given market to suit their values, needs, capacities etc. Stability of an enterprise is achievable if both its linkages, backward and forward, are local. This is to say that seeking a stable arrangement in the local market should result in stability if not high rates of profit.
4. **Ownership:** TSI has a very specific view on ownership, particularly in the case of very small and household industries. It promotes that those who have the knowledge, art or workmanship of the industry in question must partake in its



Green Bricks laying at VSBK, Datia

ownership. This idea is not new. This was the case in traditional industries and in a new way, it is again so in the software world. This is not to undervalue the importance of finance which is different from ownership. One may often find that the artisan, under today's conditions, is not able to show the necessary entrepreneurial initiative. So combinations or ownership arrangements may become necessary with the artisan as an essential component. However artisans often belong to stable solidarity groupings which provide the scope for building the social aspect of the enterprise as an integral part of the endeavor.

5. **Solidarity:** The poor person's initiatives require backing, back-up and empathy and in one word social strengthening. He or she derives this strength by being part of a group, a community, a union, an association, a co-operative or a self-help group. These are 'solidarity groups'. Solidarity means standing with one-another, supporting, empathizing, strengthening one-another. TSI point of approach suggests that these groupings should incorporate both technical and

social elements at par with one another. Traditional communities were such solidarities. However, under modernization they have turned into purely social groups with political aspirations. Knowledge based (new) solidarities can be effective instruments for breaking the reactionary stranglehold of traditional caste communities. A worthy experiment in developing a new solidarity group is a distinct possibility among those who build enterprises with renewable energy components. From this point of view one may learn by looking at the organizational work going on amongst firemen and fire-masters of brick-kilns in Allahabad-Pratapgarh-Rai Bareilly region of Uttar Pradesh being managed by TERI.

In conclusion, one may notice that the social aspect in Techno-Social Integration is related to social structure, social initiative, social change processes etc. 'Social' in TSI is not directly related to ameliorative action. However, TSI gives due importance to ameliorative action because such action is often needed to bring or lift the target groups to a level where TSI may start making sense to them. TSI is an approach which is relevant



VSBK at Datia

both to workers and owners of enterprises. It is relevant to sustainable development, development which is steady and which is eventually anchored within the community.

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Integrating Technical Action with Social Action – The Asuramunda Experience

The Vertical Shaft Brick Kiln (VSBK) intervention in Gram Vikas was expanded, beyond the initial technical action research phase, into a social action research mode, to examine the viability of a small business enterprise in providing sustainable livelihoods to a much marginalized rural community. The village of Asuramunda in Bolangir district of Orissa consisted of 50 families, more than 90% of whom migrated to urban centres elsewhere, to work as brick moulders. In the absence of any viable alternative at home, these landless families were forced to migrate, live and work in abominable conditions. VSBK was viewed as a viable alternative for a number of reasons.

1. It built on a skill already available with the people, i.e. green brick moulding
2. The scale of organization and management was suitable for a small village community
3. Organizational unity in the village suited the ownership requirements of the enterprise
4. Technology and market assured sufficient and timely employment

From the Techno-Social Integration (TSI) perspective, The Asuramunda Experience offers several meaningful insights.

TSI is built on the twin-building blocks of artisanal knowledge and solidarity. These two were key factors in Asuramunda. Rather than introducing management techniques from outside, the operation of the VSBK was left to their traditional wisdom. Only in terms of technical operations of the kiln itself, was an external input required. Even this, after the initial intervention by technicians from Gram Vikas became an area where the young men of the village established fairly high level of command.

Solidarity of the village and their coming together as one general body to own the kiln was another factor. Every family in the village owned a share of the kiln and this ownership was established through a capital formation mechanism developed by the villagers themselves. Each family subscribed to the equity capital of the unit by making contributions based on each family's ability, contribution averaging to Rs.1000/- per family. The VSBK committee, selected by all the villagers, managed the day-to-day affairs. This committee was completely answerable to the general body. Such interactions helped develop the confidence of a number of people, who hitherto had stayed away from taking part in the affairs of the village. The realization that



VSBK at Asuramunda

they had now become 'owners' of an enterprise, from being just 'workers' has further strengthened the unity in the village. A new sense of identity has developed, and this helped them become more assertive in their interactions with the outside world.

The VSBK contributed substantially to changing the then existing social and economic structure in the village, where 45 out of 50 families belonged to the below poverty line category. The *dalit* families, among the poorest in the village, found a way to assert their rights. As the most skilled brick moulders in the village, they had an upper hand in the operations of the kiln. This operational preeminence gradually spread to other areas like governance of the kiln and of the village as a whole. A similar, but less strong, change in gender relations has also taken place.

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The Strength of Brickworkers – experiences from Eastern Uttar Pradesh

There are more than 30 Bull's Trench Kiln clusters in eastern Uttar Pradesh, India, each consisting of 100-200 brick kilns. Put together these clusters produce about 10 crore bricks every year. Eastern Uttar Pradesh is the "home" of firemen community in India. It has the largest concentration of firemen estimated at 150 million, many of whom move out every year to other states like Punjab, Haryana and West Bengal in search of livelihood, leaving behind hapless families. The economic capacity of these firemen is relatively low. A migrating fireman earns about Rs. 18, 000/- per year (Rs. 3000/- per month for 6 months of kiln operation).

In the brick sector, The Energy Resources Institute (TERI) has undertaken a project on Techno-Social Integration with the involvement of NGO partner organisations (Lokmitra and PEPUS). The main objective is to enhance livelihood opportunities for the firemen community. Brick making being seasonal in India, migration of labour takes place to worksites, and therefore, on-site and off-site interaction was initiated to understand the issues including traditional knowledge of the community.

The activities so far, particularly through formation of 'sangathan' (federation of families), has touched the lives of about 1000 households in 70 villages in Lal Ganj (District Pratapgarh) and Lal Gopal Ganj (Kaurihar Block, District Allahabad). Women particularly have taken a larger role in anchoring the sangathan amongst the firemen community.

Anchoring Vertical Shaft Brick Kiln (VSBK) Technology

TERI's project attempted to anchor Vertical Shaft Brick Kiln (VSBK) within the firemen community in eastern Uttar Pradesh. VSBK is meant to provide an alternative to brick production in rural areas.

The project has done seeding through pilot level initiatives through construction of two single shaft VSBKs in Akhiraipur (LalGopalganj) owned by master fireman and Pure Kalandhar (Lalganj) owned by a fireman. The project has provided financial support to the tune of 75-90% of the total cost as loan. Remaining cost was shared by the entrepreneurs.

Bhatta Parivar Vikas Sangathan (BPVS) vis-à-vis VSBK

The project started with the major focus on dissemination and in the process got exposed to the harsh, exploitative and inhuman

conditions in the brick sector. This prompted an urge for promoting common good and making a difference in the lives of the poor unorganised workforce residing in the villages in the focus area. The project intended to address the social concerns of the firemen community through mobilising them on a common platform based on their inherent strengths. Eventually this led to formation of 'sangathans' at village and block levels.

It is envisaged that these *sangathans* may form a national level forum and work in association with other such forums which already exist, for example association for building workers, who can take up issues related to agreement with the brick kiln entrepreneurs. In the brick sector no formal agreement takes place between owners and master firemen or between master firemen and other firemen. One finds gross violation of trusts in the entire process. Hence, the need for a dialogue has been felt between firemen and owners to prepare a format for a formal agreement, which will comply with certain ground norms or values.

The project collectively aspires to bring the firemen and entrepreneurs together on a common platform for a dialogue on issues pertaining to mutual concerns. It will be a sustained effort to make the process continuous and tangible.

Future Perspective of BPVS

BPVS in the years to come is visualised as 'Sangathans' or solidarity grouping of brick artisans' families in eastern U.P. in areas of large concentration of artisan community- the reservoir of traditional knowledge. It is envisaged that the BPVS would address concerns of artisans at the kiln site as well as of their family members, especially women.

Characteristically, this BPVS will be pro-poor, pro-women and will align itself with all other people in similar conditions and struggling forward. These values are internal to the organisational form of the BPVS.

Techno-Social Integration (TSI) in the present context is a fusion of technology with traditional knowledge for promoting the well-being of small producers. Besides, it also means engaging with the markets in an effective way which does not go against societal interest. Any production process happens within a social system that is either existing or has been built for the purpose. In the latter case, the built social system, constituting of hired workforce and employer, also has to operate under a larger social system with all its norms



Focus Group Discussion with brick workers

and values. In some production processes, family, the predominant basis of a social system, becomes the workforce and it operates through integration with larger social system. As production involves technology, both work together operationally.

Technology influences the social system by creating a type of work division, work relation and working hours thus putting demand on communication, control mechanism and coordination, work cultures etc. Values and practices of the larger social system may go in tandem or resist such demands. With resistance emerges technological and social change. Technological change of large production processes generally get controlled by the interest of owners and not of larger society in alignment with the stratification and inequalities in society. People's process, involving workforce, in technology improvement gets undermined, so is the integration with that section of the society.

Issues to Ponder

In brick production, an employer generally gets bogged down for not being able to properly arrange, manage his / her workforce and its related implication on efficient fuel utilization, continuous production and cost. On the other hand, the workforce is dissatisfied with existing work arrangements and contracts. They act very cautiously, till rendered helpless due to extreme deprivation.

An emerging solution has its root in the new forms of solidarity and value emerging due to the emergence of workers' organizations (Bhatta Parivar Vikas Sangathan). It is expected that associated members will work with different values and culture, as will the VSBK entrepreneurs who are ex-firemen and related to the sangathan. Emerging integration will promote an efficient production processes with full benefits from technology. Further, technological improvement could also get equally controlled by workers and owners. Dialogues with the entrepreneur to persuade him to see the social stand point on one hand and on the other knowledge and skills of the worker may become important factors in social change strategies.

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Techno-Social Integration for sustainable livelihoods

– the journey at Development Alternatives

Development Alternatives (DA) was born out of the realization that technological innovation and change have a crucial role in alleviating vulnerability and reducing the drudgery of women and men. As the organization evolved and grew, technological breakthroughs were tried in areas that are very much a part of marginalised people's life such as cooking and shelter construction. These, along with breakthroughs in other traditional 'productive' activities such as fabric weaving were, in parallel looked at, so that drudgery reduction and income enhancement could be attempted together through technological innovation as an entry point.

The India Brick Project (IBP) supported by Swiss Agency for Development & Cooperation (SDC) was initiated with the aim of developing and disseminating cleaner technologies for production of red bricks. It is worth noting that the construction sector accounts for 22% of the total pollution in India. Counted amongst the most polluting processes, brick production alone contributes 8% of this total. In order to address environmental concerns related to brick production, the Vertical Shaft Brick Kiln (VSBK) technology was adapted to Indian conditions. There emerged a very clear potential for (small and) medium scale entrepreneurs to take up the technology as a profit making, sustainable enterprise given the

small scale of the technology and local demand for the product. Other social issues related to labour norms, gender issues, health and education of children were recognized, however these could not be addressed by DA immediately.

It was clear that DA needed to balance technological innovation with social change processes. The conceptualization of 'Techno-Social-Integration' (TSI) along with other IBP partners further helped articulate the various dimensions of a 'techno-social' change process.

Meanwhile, the social action component at DA gained further rigour through interventions in Bundelkhand. 59 families bearing 85% of the costs of constructing a check dam in Rajapur Village, by way of labour and material contribution is a case in point.

A formal attempt in strengthening 'techno-social' integration and change has been made in the form of the 'Udyamita Suvidha Kendra' (USK) at Datia in Bundelkhand. The USK aims to improve the status and participation of women from the Prajapati community and other weaker sections in technology-based income generating activities. The primary aim of the USK is to design a model for on-ground delivery of technological services oriented to



Women brick workers at VSBK, Datia

support family based livelihoods. These services bring about a higher value addition to resources and work processes, reflected in higher incomes for women from these communities.

The first enterprise in the USK was a Micro-Concrete Roofing (MCR) tile unit that commenced its operation in December 2005. This unit currently facilitates one women's Self Help Group, namely- the Gopal Baba Samooh, who had no source of income previously. This enterprise produces around 6000 good quality tiles per month, meets the local needs and taps regional markets

At present, the USK serves as a nodal technology resource cum facilitation centre for the region. It houses in its premises, amongst others, a rural building material centre (MCR and others), a 50kw power station that generates electricity from waste biomass, a mechanized pottery unit with electric wheels, a new improved kiln and a pugmill, a green brick moulding machine for producing good quality bricks, a single shaft metallic pre-fab VSBK for eco-friendly bricks; and a biomass based briquetting machine for smokeless briquettes for cooking and room heating. All of these facilities when made accessible, promote technology based livelihoods for the users - mostly women.

DA's approach recognizes that livelihoods are situated in various forms of economic entities which range from family based units to growth oriented small scale enterprises. In between, several possibilities exist such as Self Help Groups (SHGs) and jointly owned group enterprises in which ownership resides with workers engaged in the economic activity. These possibilities have assumed a place of special interest for the DA Group. Activation of the social action component in the India Brick Project and initiation of group formation and strengthening work by DA in Bundelkhand has meant that our focus, which was hitherto targeted at private micro and small scale entrepreneurs has broadened to include workers who are potential owners – jointly or individually of their productive efforts.

Gopal Baba Samooh: A Case of Women Empowerment

Richhari is a multi-caste village in Datia block, Datia District (Madhya Pradesh). It is approximately two kilometers away from the USK, located on the Gwalior-Jhansi highway. The women here are hard working and fulfill both domestic and productive roles. However, their skills and knowledge remain within the confines of the mud-walls. Livelihood activities like poultry; brick-making and agricultural works are common. The transaction of goods and commodity however, continues to be a male dominated affair.

As a result, the male partner has always usurped profits. The families were trapped in the nexus of moneylenders. Poverty seemed explicit everywhere in the village, along with scarcity of drinking water.

In mid 2005, motivation and skills of women to work together to stop poverty led to the formation of Gopal Baba Samooh – a women's Self Help Group of ten members. The Group started saving twenty-five rupees per month per member. In December 2005, the group took the decision to start an MCR enterprise to make the Gopal Baba Samooh financially viable after having an exposure visit to the USK and TARA gram. DA also agreed to provide the necessary infrastructure and raw material facilities and helped them prepare a business plan; they worked accordingly and prepared 2000 tiles in the very first month. The initiative boosted the morale of the group as well as other village women to become self-reliant. Now, these families are breaking free from the shackles of moneylenders and many more women are looking forward to start their individual businesses.

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Win-Win Approach in Nepal Brick Industry

This is the story of Laxmi, a green brick moulder working in Nepal.

In February 2006, Laxmi Gole and her husband Arjun were working hard in haste to meet their usual target of green brick moulding, ignoring their 18 months old crying baby. Laxmi had been facing difficulties with her dual role of a mother and family's breadwinner since she became a brick moulder. Every moulded green brick meant income for her family. Childcare is a major factor that reduces productivity for parents like her along with other factors such as illness, household chores and festivals. Less productivity means less earning and less food for the family. The childcare centre (CCC) set up in the industry premises with the intention of providing quality childcare to the children of brick workers, managed by a joint management committee of her co-workers and employer, was closed for two working days. The eldest daughter who could have taken care of the crying baby was also engaged in green bricks moulding so that she could add to the family's income. For an outsider, it appeared as a green brick making competition, however the reality was different. In fact, in these two days, they could make only 1900 green bricks as compared to 3200 pieces, which is their average moulding capacity on the other days. Their income went down to Nepali Rs (NRs.) 163 (40%) from NRs 400 per day. The baby was not happy to be away from her little friends and play environment in the CCC. This is just one instance that shows the value of a CCC for brick workers. The CCC has made a similar difference to the life of the other 20 brick moulding families and their 25 children in the brick industry in the Kathmandu Valley of Nepal.

Laxmi with her family migrates seasonally from Kavre, a conflict affected rural hill district, to work as a moulder in Satya Narayan Brick Industry in Kathmandu Valley in Nepal. She is among those 63'000 workers in 120 brick industries in the Kathmandu Valley who seasonally migrate with their families. The total production cost of 1.2 billion bricks, produced annually in the Kathmandu Valley alone, is about NRs 2.5 billion, out of which 35% is labour cost. 20% of the total earning by brick workers is taken back home, strengthening the economic linkages between urban and

rural areas and neighbouring village economies. Satya Narayan Brick Industry is the pioneer brick industry that has adopted VSBK technology in the Kathmandu Valley to improve environmental performance. It is also among those two brick industries that joined hands with VSBK Technology Transfer Programme funded by Swiss Agency for Development Cooperation (SDC) to initiate and test actions and approaches that improve living and working conditions of brick workers and their families while improving relationship between workers and employers to create a win-win situation.

A VSBK entrepreneur seasonally operates (6 months) a childcare centre within the industry premise since November 2003. Mangal Maharjan, the manager of the industry, has realised the benefits even against upfront investment of about NRs 100'000 for establishment and NRs 60'000 (10'000 per month for 6 months) for seasonal operation costs. According to his analysis, there is an average 40% less production when the CCC is closed. Then he would require additional 11 moulder families to meet annual requirement of 8 million green bricks. He also sees indirect benefits of less management burden and associated responsibilities to provide basic facilities and services to additional 11 moulder families. With this, he also minimises the risks associated to advance payment to workers. Mangal is proud to present himself as a socially responsible entrepreneur doing small actions at practical ground to benefit both parties. He looks back and feels satisfied that change can be initiated with a careful process and a modest upfront investment. He happily shares that it has created a platform for discussions between him and the workers for respective rights and responsibilities.

Parents like Laxmi gladly pay NRs 5 per day to put their children in the CCC, towards running the facility. It not only eases parents' work but they also see benefits of early childhood development and better care by trained caretakers. It has also helped ensure safety of children.

Successes and benefits of the Childcare Centre project become self evident for the VSBK Programme-Nepal when other brick



entrepreneurs who are not adopting VSBK technology request for technical and mobilisation support to operate a CCC in their industrial premises. The approach will be considered successful and sustainable if this action and approach of CCC is taken as a part of the brick industry by 120 brick industries providing direct benefits to 10,000 children aged below 10 years.

The approach to involve workers in decision making and management of the CCC will also have value added impact on empowerment of these economically and socially poor people. Hopefully, they will acquire skills and confidence to deal with deprivation due to seasonal migration pattern such as interrupted access to health, education services and participation in village level development activities.

Hopefully, it would also bring about change in public perception about the brick industries since the income opportunities that are provided to poor workers are overshadowed by a stark image of the brick industries as the second largest polluters in the Kathmandu Valley.

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Regional Knowledge Platform



Auroville Earth Institute aims to research, develop, promote and transfer earth-based technologies which are cost and energy effective. These technologies are disseminated through training courses, seminars, workshops, publications and consultancy within and outside India.



Centre for Ecocentric Development and People's Action is a non-profit, non-governmental organization working over the last 14 years for "People Centered, Eco-Centric Development."



Coastal Area Disaster Mitigation Efforts is a network of twenty voluntary organizations working for upliftment and disaster preparedness of Fishing Communities in India.



Exnora works as a catalyst in bringing about local initiative and community participation in overall improvement in quality of life. It aims at developing civic and environmental consciousness among citizens through self-help, enactment of suitable legislation and environmental protection initiatives.



Gram Vikas is a rural development organization, working with poor and marginalized communities of Orissa since 1979 making sustainable improvements in the quality of life of the rural poor. 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.



Grambangla Unnayan Committee, Bangladesh is a non-profit, non-governmental voluntary development organization working over the last 12 years for people whose lives are dominated by extreme poverty, exclusion, deprivation, illiteracy, disease and handicaps.



Orissa Development Technocrats' Forum is a registered society working to facilitate an effective rural housing delivery system in Orissa through formalizing the rural construction sector and the "Promotion of Appropriate Construction Technologies and Opportunities for Sustainable Livelihoods."



Society of Environmental Journalists, Nepal is a national level media organization working in the sector of environment. Their mission is to build up public awareness on environmental issues by enhancing capacities of local journalists for improved quality, accuracy and visibility in environmental reporting.



Trust for Village Self Governance is a charitable trust focusing on local self governance in villages using panchayat as a tool. Their focus is on creating sustainable employment and providing opportunities in habitat development.



Unnati is a non-governmental organization working over the last 15 years for "civic leadership promotion and strengthening local self governance."



Aga Khan Planning and Building Services, Pakistan works to improve the built environment, particularly housing design and construction, village planning, natural hazard mitigation, environmental sanitation, water supply, and other living conditions. These goals are achieved through the provision of material and technical assistance and construction management services.



Development Alternatives is a not-for-profit sustainable development enterprise that designs and promotes programmes and products which, through the use of alternative technology, contribute to the enrichment of human life.



Swiss Agency for Development and Cooperation (SDC) is Switzerland's international cooperation agency within the Swiss Foreign Ministry. The Rural Housing Project (RHP) supported by the SDC focuses on providing choices and access to poor rural families for improved housing, especially for affordable, energy and resource-efficient and environment-friendly building material and technologies.

basin-South Asia Regional Knowledge Platform (basin-SA) is committed to "developing knowledge systems and promoting collaborative action within South Asia to enable access by the poor to sustainable habitat and livelihoods."

The South Asian node of global 'basin' network was set up in 2004 to enable knowledge development and sharing. It seeks to promote collaborative action in the area of habitat and livelihoods for poverty reduction. The parent Network has successfully provided relevant and timely knowledge and resource links to government agencies, financiers, builders and developers, architects, planners and producers of building materials. It houses an intensive knowledge base and supports the regional node in quality management of its products and services.