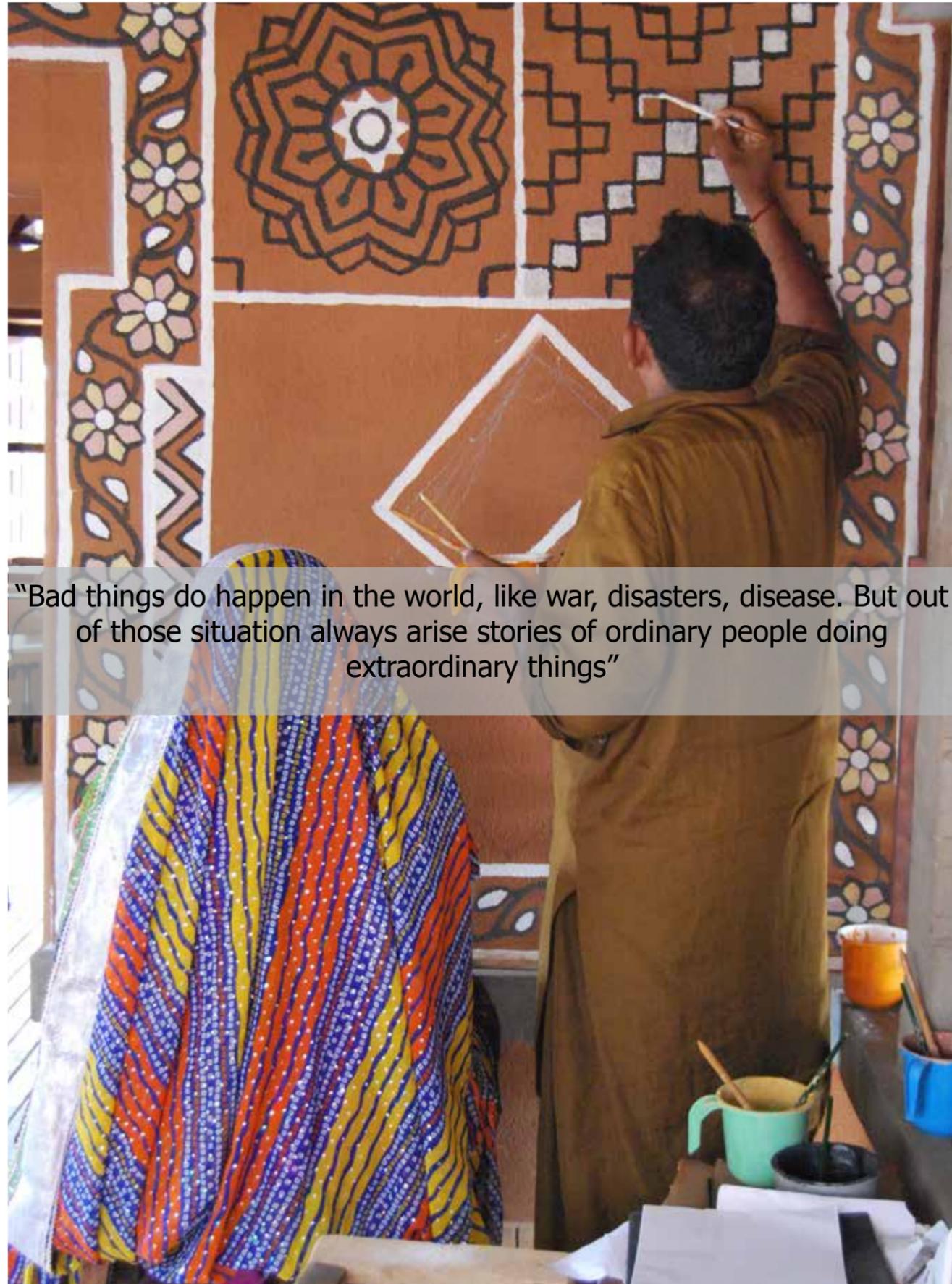


Annual Report 2014-2015

Hunnarshala Foundation for Building Technology
and Innovation

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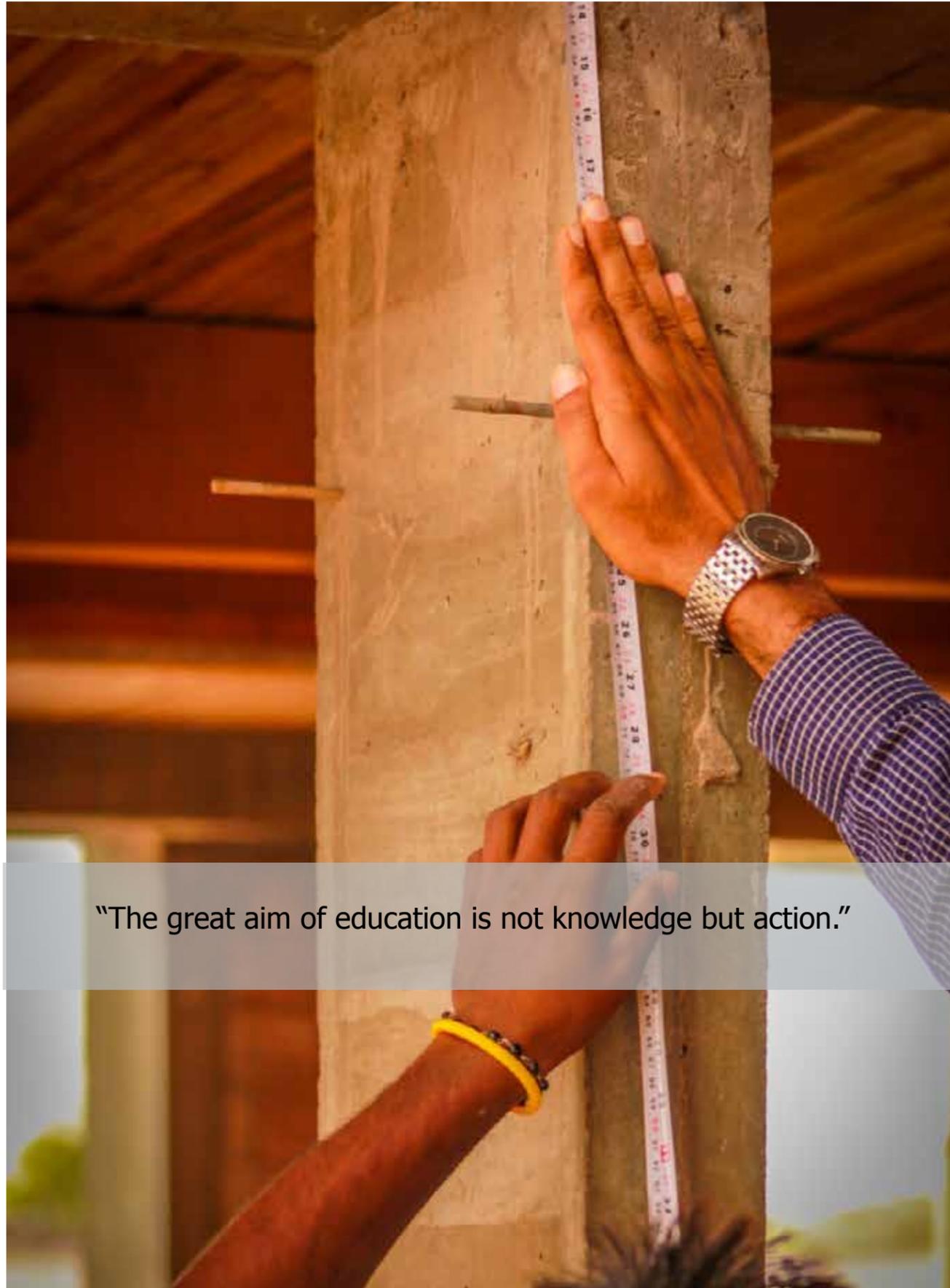
“Bad things do happen in the world, like war, disasters, disease. But out of those situation always arise stories of ordinary people doing extraordinary things”

Introduction

The massive earthquake of Kutch in the year 2001 brought together few professionals to form a Shelter Cell under the umbrella of Kutch Nav Nirman Abhiyan. This cell addressed facilitation of housing for the disaster affected people. As the rehabilitation work was on the verge of completion, a possibility to form a not-for-profit company to continue working collectively was seen by the professionals.

In 2003, “Hunnarshala Foundation for Building Technology and Innovations” was incorporated as a section 8 company (formerly section 8 was section 25 of companies Act 1960) of the Companies Act 2013, with the participation of Kutch Nav Nirman Abhiyan, educational and scientific institutions like CEPT, IIS, CSR Auroville and companies like HDFC, Gruh Finance and Transmetal Industries. Hunnarshala initiated its journey with the cause of disaster rehabilitation. During this process, it supported the building of temporary shelters and permanent reconstruction for various governments, funding agencies and NGOs.

Over the years, Hunnarshala has evolved as an institution that provides an open platform to artisans, students, artists and professionals who collaborate for contributing, learning or developing ideas / technologies, thus becoming part of this movement. Through these collaborations and inter discipline synergies, Hunnarshala envisages to create awareness on sustainability. We feel its time to share the knowledge gained during its journey in a structured manner through education programs developed for various sections of our society be it artisans, students or communities.



“The great aim of education is not knowledge but action.”

Karigarshala

An Education Initiative for Students

After working with both the rural and urban communities in many parts of the world, Hunnarshala realized that a huge chunk of the youth had to drop out of mainstream education due to various reasons like poverty, non-availability of proper schools etc. They had little chance of getting education and would end becoming labourers in different trades. On the other hand, the communities had traditional knowledge and hand skills, which were soon getting obsolete due stiff competition from the modern markets. Thus the idea of a “shala” for “karigars” was born with the following objectives:

- Creating a platform for young boys and girls, school dropouts, child labors who have discontinued their education either to support the family or due to lack of proper guidance.
- Providing education through not only development of hand skills in a specific trade but with a focus on life values, confidence building and instilment of professionalism.
- Disseminate scientifically validated traditional knowledge among the younger generation of communities, so that the traditional knowledge and its practices are preserved within these communities instead of leading towards extinction.
- Creating awareness within the rural society to encourage young students to pursue hand skills.
- Rebuilding the confidence and skills of students who are exposed to exploitation as child laborers and those adversely affected by mainstream education

Karigarshala is now in its fourth year of existence after it was started with a course on carpentry in 2011. The following year a course on masonry was also introduced.

Activities in 14-15

About 60 students have graduated from Karigarshala since then. The courses in masonry and carpentry offered to students at Karigarshala engage them through the learning mode and the production mode. The learning mode helps the students understand the theoretical concepts along with practical training at the school. During the production mode, the students get to apply their learning and training on an ongoing project.

The new batch started on June 15th 2014 with 18 students, 9 in both masonry and carpentry courses. The students are from Gujarat and Madhya Pradesh.

Carpentry

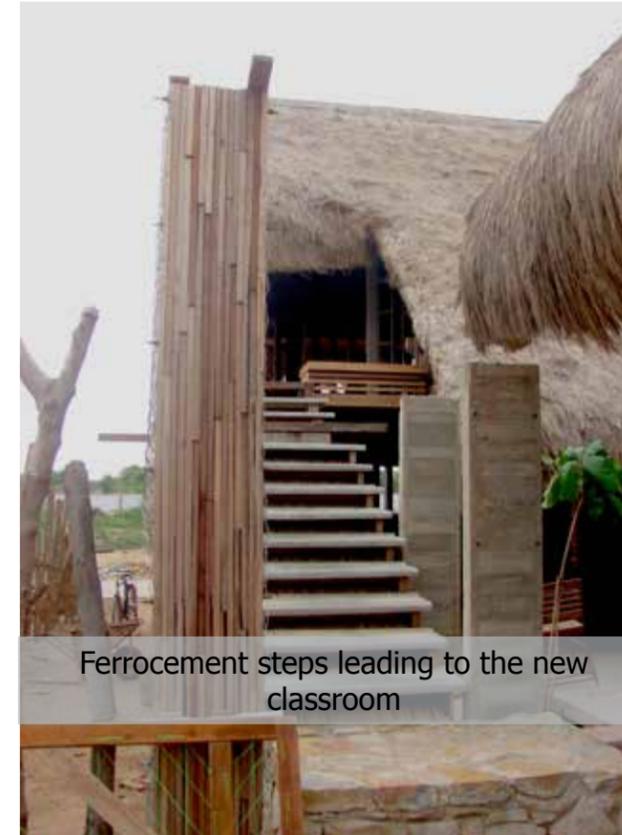
- Every year, Karigarshala and IPSA Rajkot organises workshops to help artisans and designers collaborate and develop a mutual respect and understanding of each other's skill. The first phase of the workshop was organised in the Hunnarshala campus where the students from IPSA Rajkot visited the campus and worked with the carpentry students of Karigarshala. In the second phase, the students of Karigarshala visited IPSA Rajkot to produce designs made by the architecture students. The workshop provided a knowledge and skill-sharing platform for the students.



Floorboard construction and installation in progress by carpentry students

- As part of the production mode, the students constructed floorboards for a project by Architect Hiten Kakadiya.

- A new classroom was added to the campus of 'Karigarshala' for the students of carpentry. The students themselves undertook the entire construction that included wooden floorboards and windows.



Ferrocement steps leading to the new classroom

Masonry

- The students of masonry gained hands-on experience by helping an NGO, Unnati build a "Wall Technology Park" in Bhachau. The students worked with technologies like stabilised adobe, CSEB, and rammed earth.
- Under the guidance of one of the faculty member Pangu Singh, the students built rammed earth walls at a farmhouse for Dr. Villas Sathey in Jam Nagar.
- Research activities were also taken up during the course where students built a room from sub-structure to super-structure to test different materials and techniques.
- The students restored some parts of the historic Bhujio fort wall.
- Ferro-cement steps for the access to newly constructed classroom in the Karigarshala were built and tested by the students.



Bhujio fort wall restoration

Incubation Companies

Kamerai is a partnership firm for the walling system students and Ozari for the carpentry students. After the course of one year is complete the students have an option to be part of the company for a period of 15 months and thereafter they are replaced by the next batch of students passing out. All the students are partners in the firm and have elected their representatives for legal compliances.

Project by Ozari



Construction and installation of floorboards at the farmhouse for Dr. Villas Sathey



Tarak finished the carpentry course from Karigarshala in May 2015. He is now part of the incubation company, Ozari. Here are some glimpses from his journey.

How did you decide to become an artisan?
I couldn't complete my secondary schooling and after that wasn't interested in pursuing education. I was fascinated to be an artisan and found out about Hunnarshala through my father's friend. It inspired me to take up carpentry as a profession. In Karigarshala I saw the opportunity to learn this skill.

Which all projects did you work on and what all challenges did you face?

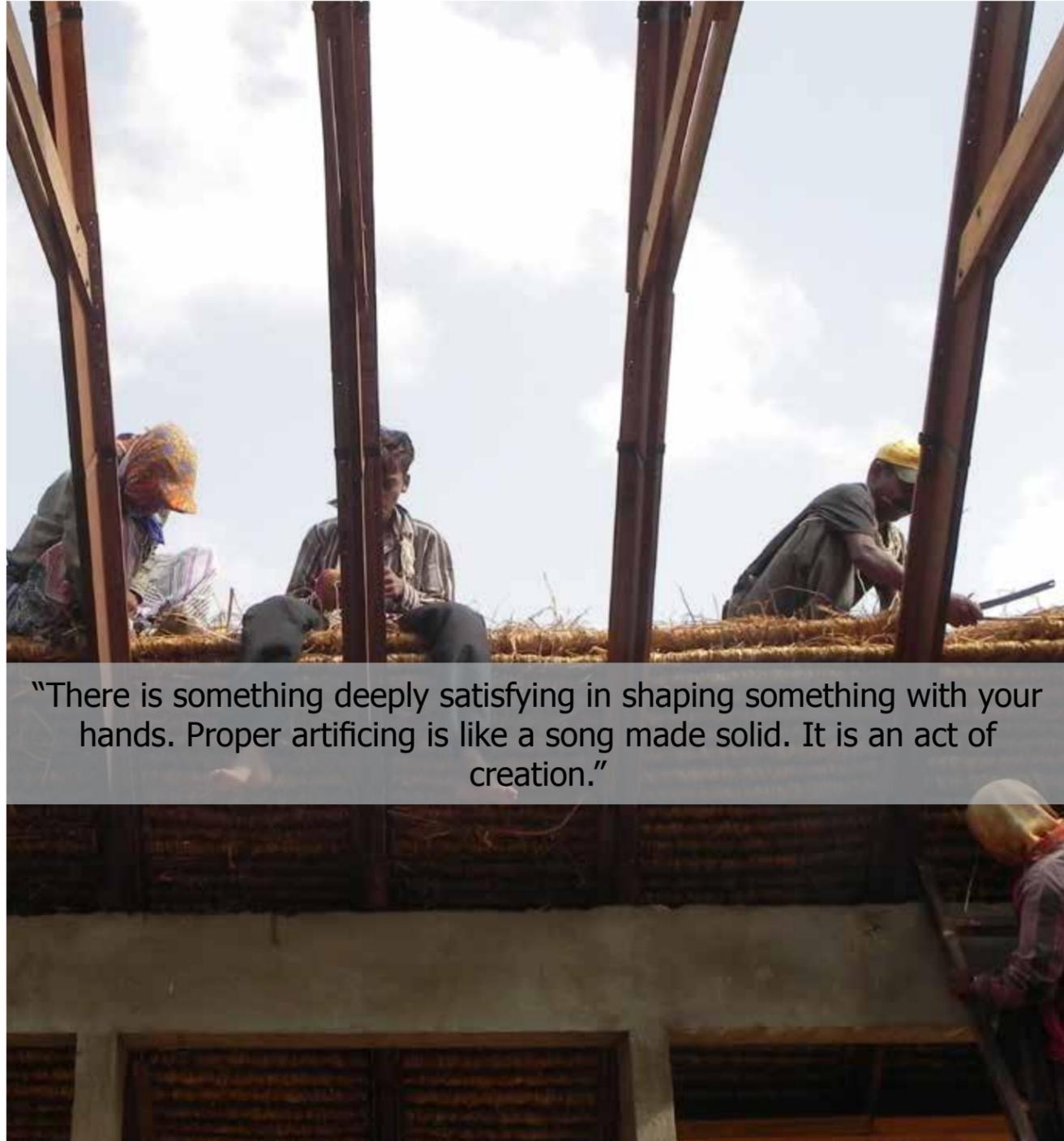
After I joined Ozari along with 8 other batch-mates of mine, I worked on projects based in Kukeri, Anand and currently I am working on a Buddhist Centre in Sakarwadi. Each project came with its own set of challenges through which we gained subsequent leanings. Like when we built floorboards of longer span for the first time for the project in Anand.

What is the experience of working in the incubation company like Ozari?

This is a really good learning opportunity for all of us before we start taking up work all by our own and the innovative details that we are working on is giving us a lot of confidence.

What do you plan to do after ozari? Are there enough avenues open for you in the place where you come from?

I may work for Hunnarshala or be carpenter in my hometown. But at my place there are not as many opportunities for as we have here.



“There is something deeply satisfying in shaping something with your hands. Proper artificing is like a song made solid. It is an act of creation.”

Artisan Empowerment

Building artisans have a deep understanding of traditional materials and techniques, which has been passed onto them through generations. But they stand on the brink of becoming obsolete due to fierce competition from modern materials and construction techniques. Hunnarshala understands the potential and capabilities of these artisans and thus has involved them in different projects so that they can demonstrate their skills with dignity and not just as mere labourers.

The artisan empowerment unit through the artisan entrepreneur companies is promoting alternate and appropriate technologies. Different technologies are being implemented on different projects of variable nature, from farmhouses to restoration. Technical and design assistance for new projects are being taken with the objective of expanding options with the artisans.

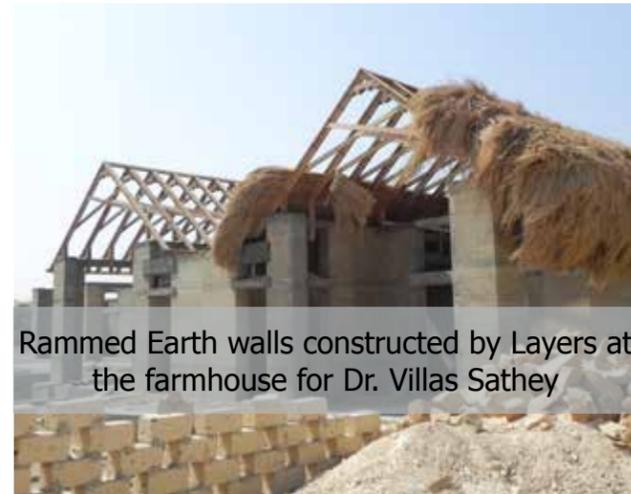
Hunnarshala has worked with Artisans for more than a decade. Apart from being committed to their skill and craft, the artisans have the potential and the capacity to become entrepreneurs and take up projects on their own. To hone their capacity as entrepreneurs, 4 artisan entrepreneur companies were formed. Hunnarshala supports the companies in providing them the required infrastructure to function. Links them to the market and provides technical as well as administrative guidance. Websites for the companies have been designed too to help them tap the potential clientele with ease.

Artisan Enterprises

Layers

Layer, the rammed earth company, is a partnership company consisting of 4 members. They specialises in the construction of stabilized rammed earth walls.

Projects by Layers



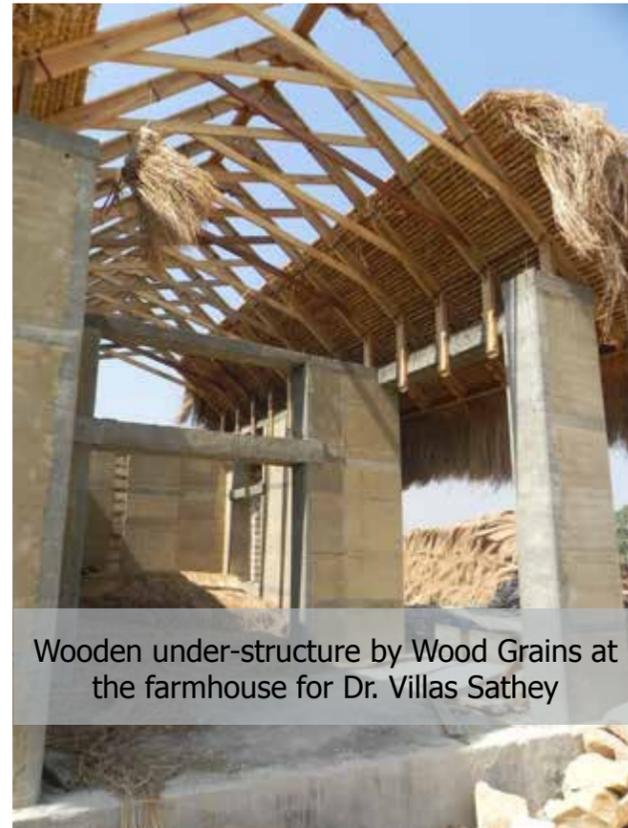
Rammed Earth walls constructed by Layers at the farmhouse for Dr. Villas Sathey

Span

Span- space frame systems, a proprietorship company started by Mr. Magan R Bijlani who has been associated with Hunnarshala since last 10 years. SPAN specializes in assembling and installing space frame roof under-structure.

Wood Grains

Wood Grains is a proprietorship company started by Mr. Shravan Bishnoi, an artisan associated with Hunnarshala since 11 years. Wood grain specializes in making wooden roof under-structures and louver windows.



Wooden under-structure by Wood Grains at the farmhouse for Dr. Villas Sathey

Matha Chhaj

Matha Chaj is a "thatch company", the women's collective specializing in thatch roof solutions.

Projects by Matha Chhaj



Thatch work in progress by Matha Chhaj at farmhouse for Dr. Villas Sathey

Lustre

Lustre is an artisan company deals with external and internal finishes with a specialized work in lime plastering.

Heera Hamirbhai is an artisan from Abdasa who has worked with Hunnarshala Foundation for 9 nine years. He is one of the partners in the newly constituted artisan company, 'Lustre'. He shares his journey from an artisan to an entrepreneur.

Where did you learn the craft of lime plastering? How long have you been doing this?

We used to work as artisans in Hunnarshala and have learnt this skill there from Khimjibhai. Apart from that we are also skilled in mud masonry work and carpentry. A major learning I would say came from the fort restoration work we did at Abu Dhabi where we learnt detailing of rammed earth foundations and plastering with a soil based material which was supplied by a company there. It has been over nine years that we have been doing this work

From where did the idea of formation of a company 'Lustre' come from?

The thought of initiating the company came when we wished to work independently and take a particular skill forward. That's when I and Babu bhai along with 13 more people started Lustre. We are right now working on our first project, Penha d' Franca church in Panjim Goa.

What are your expectations from yourself as an entrepreneur?

We would like to offer more of our services and do better work each day. While we were working in Goa we received many visitors who praised our work of preserving the traditional techniques and a lot of architects also praised the quality of our workmanship. There are even talks of starting restoration work in four other churches. We would want to continue working to strive for better quality of workmanship.

What changes have you seen in the craft over years?

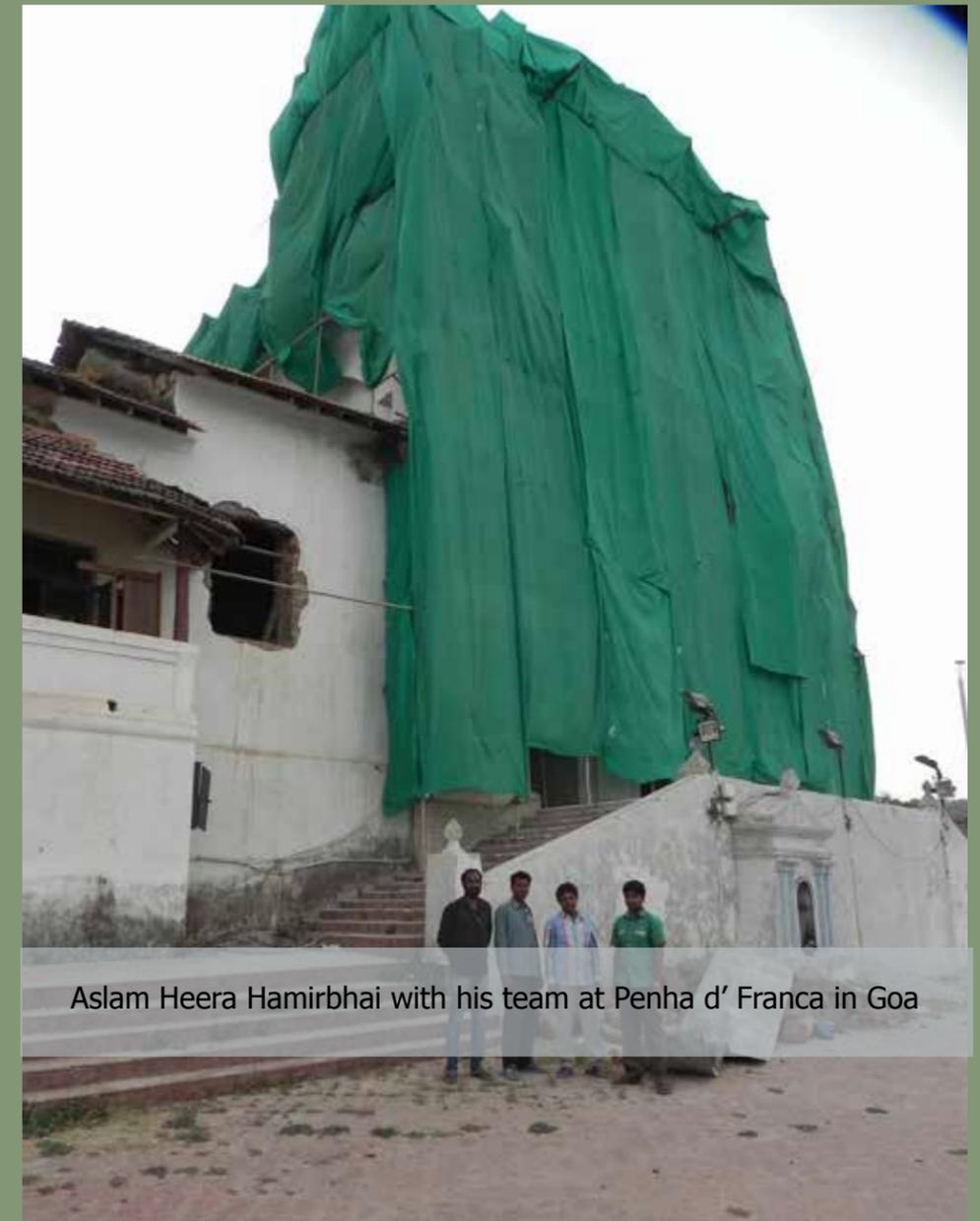
The technique of plastering has not changed much, but over the years we have learnt to make different compositions or mixes for plastering based upon the climatic condition where the work is to be executed. Even the number of layers, which are to be applied, and the way they are to be cured is of vital importance which subsequently determine the quality. Before starting the work on site, we make samples and test them in the laboratory. For example, in Goa we are using special chipla (crushed sea shells) along with guggad resin, jaggery, sand and lime whereas in Bhuj we used to add marble dust. During this we also explored another 350 years old traditional technique of Goa in which the extract of falcon tree is added to the last surface finish.

What kinds of opportunities are available in the market?

There are a lot of opportunities specifically in places where people are getting conscious about using the locally available resources and traditional construction practices. In cities like Ahmedabad and Gandhinagar, lime plaster is being preferred over cement plaster in a lot of projects.

How do you see yourself expanding the work possibilities?

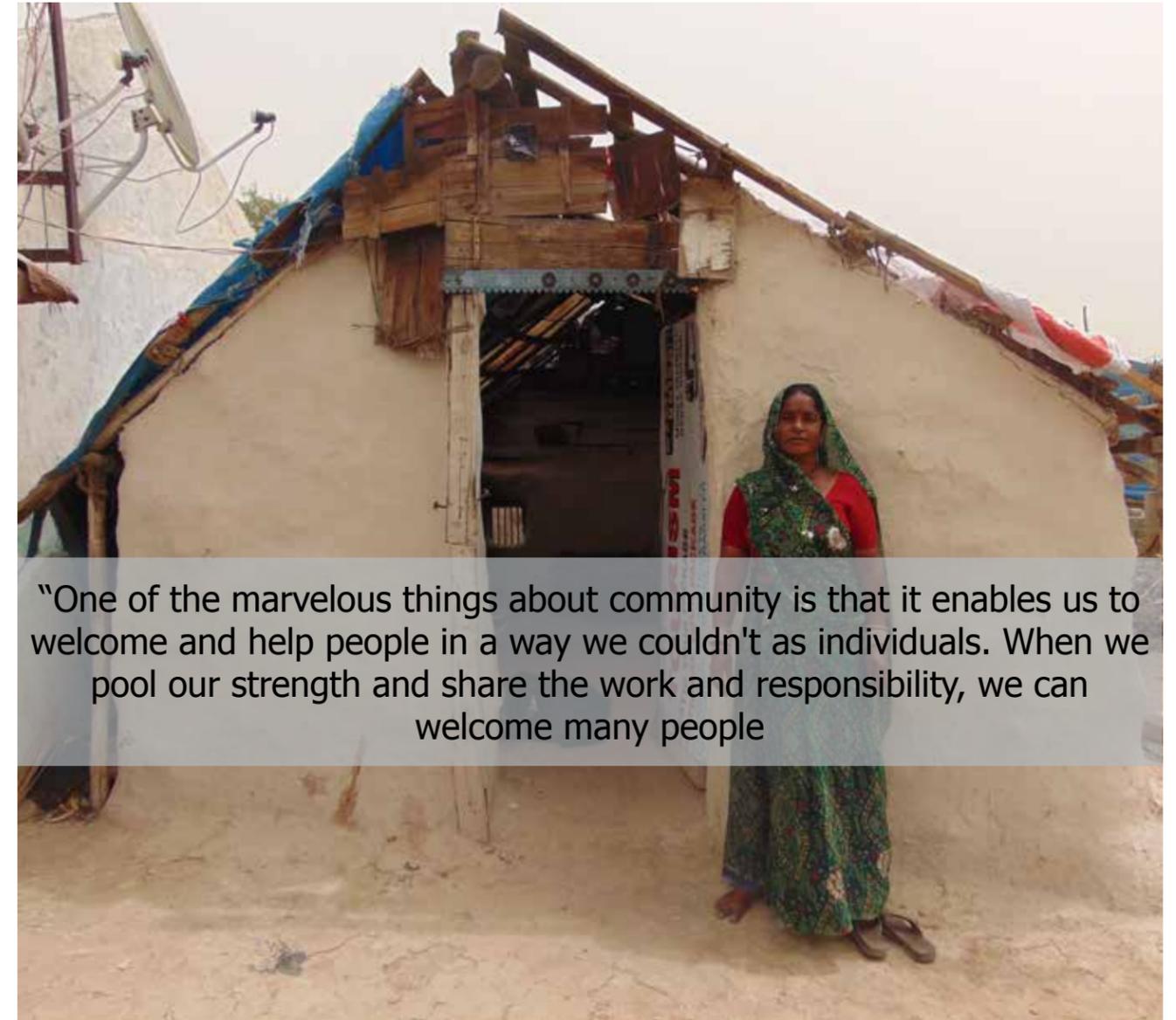
We would like to take up more projects and keep on innovating the techniques we have already learnt and explore local alterations of the craft as well. Moreover we wish to foray into low cost constructions for poor people.



Aslam Heera Hamirbhai with his team at Penha d' Franca in Goa



Artisans working at the restoration site of Penha d' Franca, Goa



"One of the marvelous things about community is that it enables us to welcome and help people in a way we couldn't as individuals. When we pool our strength and share the work and responsibility, we can welcome many people"

Community Empowerment

This is the core initiative that forms almost all of Hunnarshala's work. The master artisans and our building professionals work together to develop contemporary solutions using traditional materials and building knowledge. The main aims of the initiative are:

- To help communities redevelop their villages; settlements post natural disasters like floods, earth- quakes, storms and their like; to communities displaced due to violence due to communal strife or caste discrimination.
- To help communities who have been displaced due to development projects, be it industries, or relocating people from wild-life reserves
- To work with urban communities to redevelop their slums into neighbourhoods or help social housing programs in villages recognize and improve the diverse building science of our traditions.
- To help communities celebrate their knowledge, their expression by building community resorts and homestays.

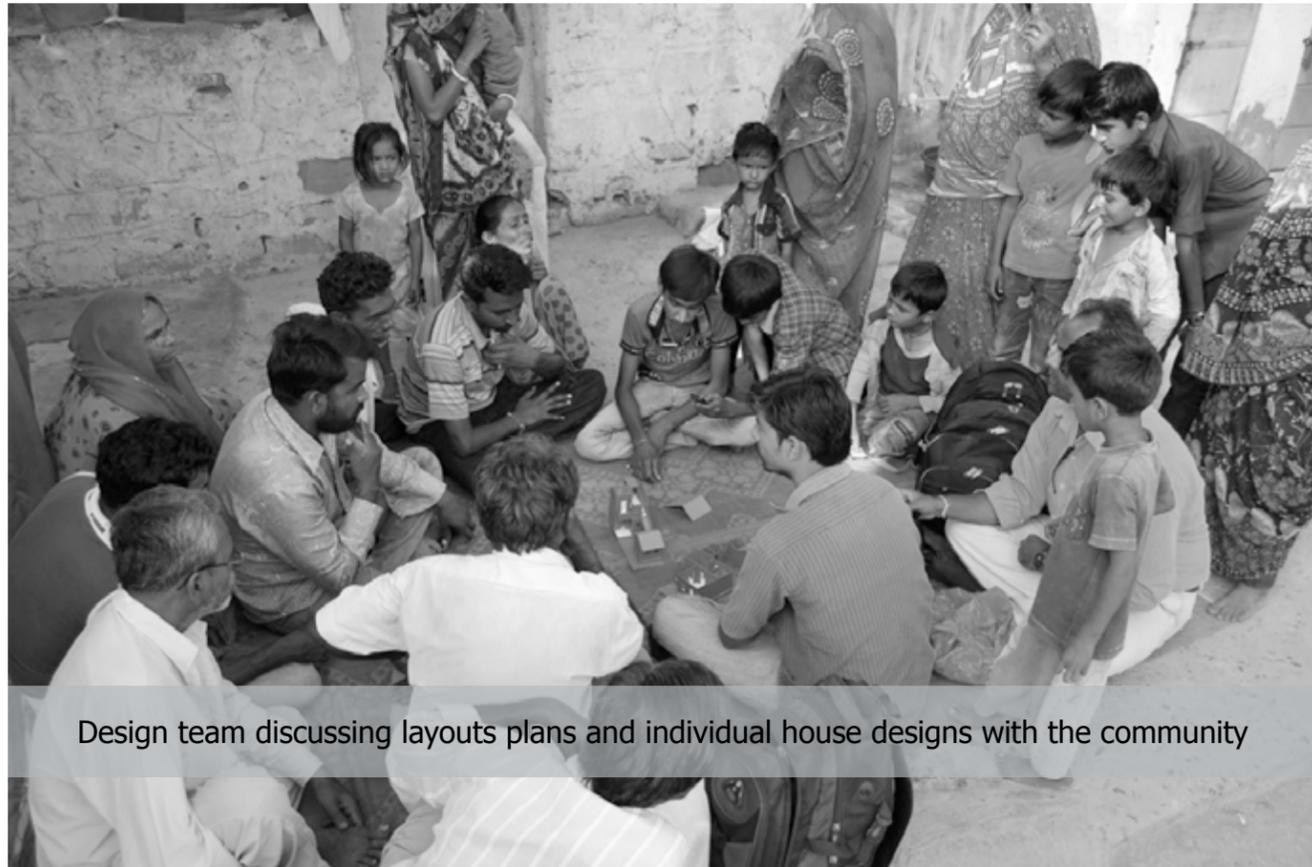
Owner Driven Slum Redevelopment

The Central Government of India has initiated Rajiv Awas Yojana (RAY), for the slum dwellers and the urban poor population of the country. Bhuj was included in the list of cities where government wants to implement the RAY project. According to a survey conducted in 2009-10, there were about 76 slums in Bhuj in need of about 11000 houses. This was an opportunity for Hunnarshala and NGO's working for the development of the slums in the city. Hunnarshala submitted a proposal to the Central and State government for the redevelopment of slums in Bhuj city. Hunnarshala Foundation was appointed as the Project Management Agency for implementation of RAY in three slums in Bhuj, Gujarat by Bhuj Nagar Palika. 314 houses shall be redeveloped in 3 slums; Bhimrao-1 Nagar, Ramdev Nagar and GIDC relocation site.

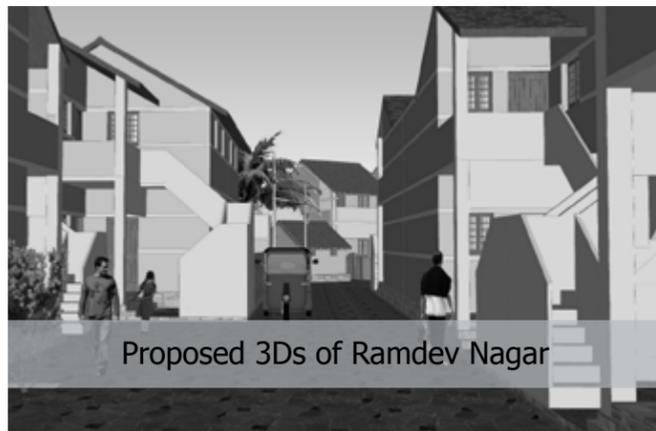
- The design team worked on unit plans and cluster design with the community to come up with a solution, which was best, accepted by everyone. A city level steering committee, under the chairmanship of the District Collector was further constituted to take the agenda for RAY and Slum Free City Plan of Action. The committee members include officials from BHADA, Bhuj Nagarpalika and representatives from Hunnarshala and other supporting NGOs.
- The land papers were identified for the redevelopment of 314 houses in 3 slums; Bhimrao Nagar, Ramdev Nagar-1 and GIDC were filed as per the Layout plans development in reference of BHADA Development Plan, and existing land under the slums to DLIR for justifying the ownership of the land. DLIR surveyed the land and earmarked a new boundary for redevelopment. As per the land finally made available, Layout plans were revised. Bank accounts for 285 beneficiaries of the 3 slums were opened in ICICI Bank.



Community discussion at Bhimrao Nagar



Design team discussing layouts plans and individual house designs with the community



Proposed 3Ds of Ramdev Nagar

- Chief Minister of Gujarat, Anandiben Patel inaugurated RAY in Bhuj by laying the foundation stone of one of the houses to be rebuilt in Ramdev Nagar on 28th February 2015. MOUs were signed between beneficiaries and Bhuj Nagar Palika and about 120 beneficiaries received the first instalment of INR 50,000 to start the construction of houses.
- 7 new slums with 450 houses were also identified for preparation of new DPRs.

Purshottam Dhanjibhai Vaghela, one of the RAY beneficiaries is about to start the process of building his own house at Ramdev nagar along with four of his brothers. He is from Bhuj and belongs to Devi-Pujak community.

Tell us about your community and livelihood?

Mostly, our community people do masonry work or work in shops as daily wage workers, while women majorly do household chores. But they are well skilled at making godada (blanket). Many years ago our women used to earn by making sungli leaf sweets. Presently, building mandaps for marriages has become one of our major occupations as well.

How did you get to know about RAY and what was the process of participation?

This process started almost six to seven years back, when different people from various NGO's started visiting our settlement and started talking to us about our lives, the way we lived, our houses, and our children. That was for the first time we confronted the present reality and different possibilities for our future. Then eventually we all came together as a community and a sense of belongingness grew in us. With this realization came a will to look at ourselves as "a society, a colony which is more VIP than the Jhupadpatti we inhabit". It also instilled in us reassurance that 'government is not just power', it can also think about people like us.

What changes have you observed in your community after this entire process started?

There has been many minor and major changes, which have happened in our lives in the past few years. One that makes us really proud is that now our women have a mahila mandal named 'Sakhi mandal' which raises a monthly fund of some sixty rupees from every family which helps people from our community by providing loans when in need. This has bound us all and now we think collectively about our future. Even our children have started going to schools, though they study only till 7th or 8th standard.

Apart from that do you feel any drawbacks in any process?

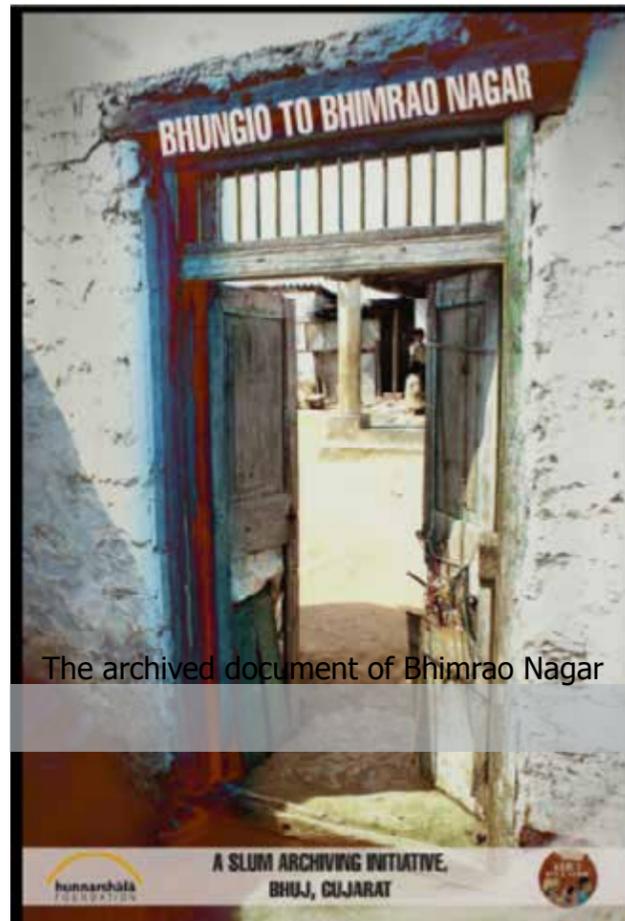
Nothing majorly, but only thing we felt in the design was that if the gutters were in the front of the house it could have been better managed by ourselves only. Other than that now we surely feel 'Sarkar upar hakk thayo' and we are starting a new life.

Community Archiving

Bhuj was recently included in the list of cities to be made slum-free by 2023 through the implementation of Rajiv Awas Yojana, a centre housing scheme for the urban poor. About 76 slums in the city of Bhuj shall be redeveloped as a part of the housing programme. The first phase of the project started with the proposal to redevelop 3 slums, Bhimrao Nagar, Ramdev Nagar and GIDC. About 314 houses shall be rebuilt in these 3 slums.

The communities of these slums have been struggling for a long time to get their housing rights. The rebuilding of the houses will bring an end to this struggle with a renewed hope for life. The slum archiving Initiative is taken up to document this struggle with a changed perspective. It is an attempt to change the way we look and perceive slums by celebrating their communities, customs, traditions, services they provide to the city etc.

In a short period of time, the present structure of these slums will give way to newly planned and constructed settlements. These slums carry within itself stories of different generations it has seen, stories that need to be preserved and passed on to the coming generations. It is a chance for the communities of slums to re-discover themselves and present themselves with dignity.



The archived document of Bhimrao Nagar

Housing for Riots Affected

Hunnarshala was invited by an umbrella organisation called Joint Citizen's Initiative formed by Sanathkada, Vanagana, Sadbhavna Trust, and some independent citizens in response to the communal riots in Muzaffarnagar which displaced thousands of families. The Government gave compensation to people from 9 worst affected villages in riots. Some families have bought land from the compensation money. Hunnarshala and JCI are working together to rehabilitate these families. Hunnarshala is building houses while JCI working towards taking steps for a more holistic rehabilitation. It includes working for healthcare, sanitation, education, spreading awareness about various government schemes for the people etc.

Hunnarshala started work with 17 families in the month of May 2014 in the Aryapuri village of Kairana block of Shamli district.

The construction of 20 houses was completed in the first phase of the project. Construction of another 100 houses along with 100 toilet blocks has been started in Shamli and Muzzafarnagar districts.



The construction of a house for beneficiary in progress at Muzzaffarnagar

Technical Facilitation of Indira Awas Yojana

Consortium of Hunnarshala Foundation, People in Centre Consulting, BuildAur and Thumb Impressions is collaborating to provide technical facilitation with mandate received from CRD. The objective is to ensure technical support for IAY implementation at district level through development of appropriate design options, technical guidelines for each option, prototype demonstrations and training. The team of 41 members of the consortium did a study of the existing typologies of houses in Gujarat that were published and accepted by the Technical Committee. Appropriate designs were developed for the next phase with extensive involvement with the IAY beneficiaries, which were approved by the technical committee.

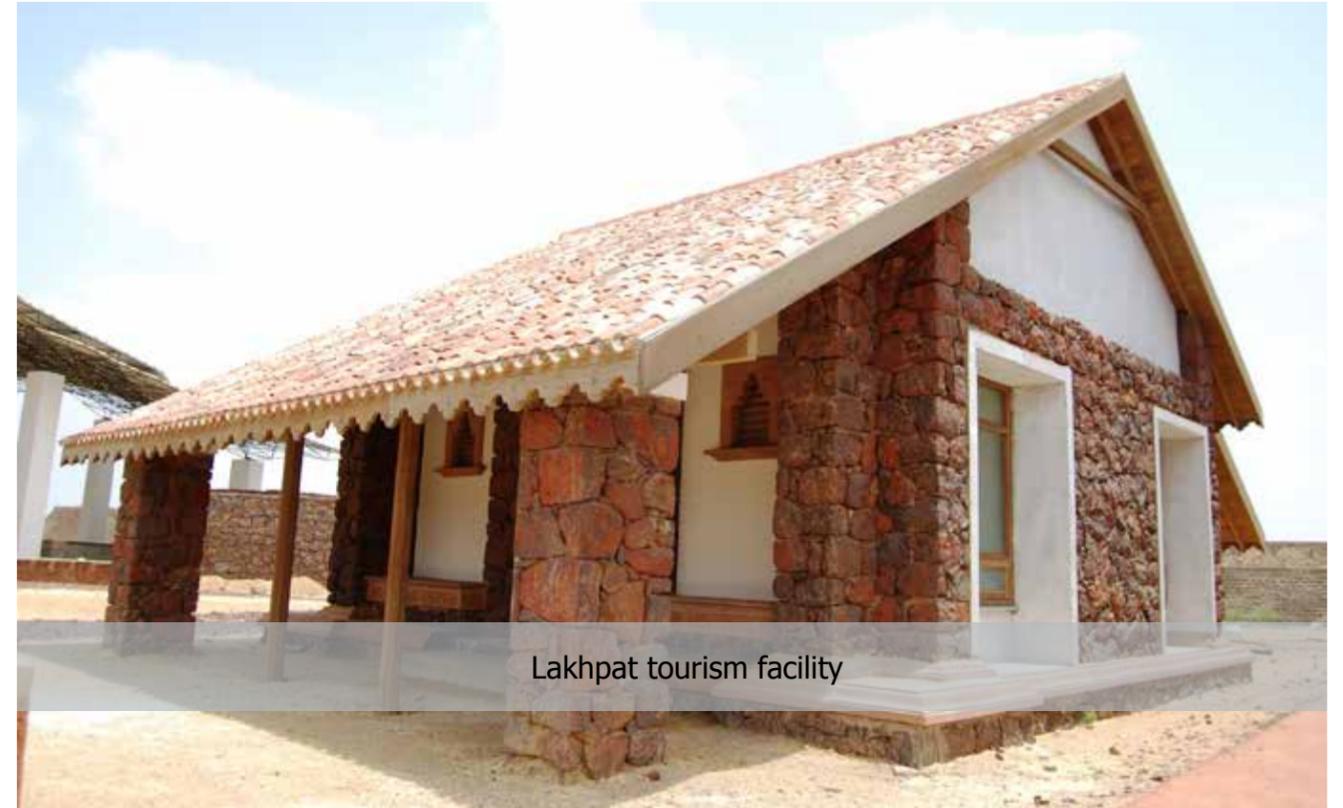
As part of 'Housing Facilitation Support System', Commissionerate of Rural Development, Government of Gujarat, has proposed to set up Building Technology Museums in each of the five typology zones. To demonstrate the range of solutions, deriving inspiration from the cultural heritage of the region, its tradition of artisans and crafts, as well as ensuring rigour of modern science and technologies, Commissionerate of Rural Development has identified five locations to set up Building Technology Museums. These Building Technology Museums are envisaged as active repository of building systems of the region and take the traditions forward in contemporary context. The building Technology Museums will inform and educate on design and technologies for housing, sanitation and other related aspects of habitats in the region. These Building Technology Museums are planned as active centers of learning and education for artisans and rural communities and not just be mere archives of traditional knowledge systems.

Taking the traditions forward, these Museums will demonstrate prototype rural housing design options and technologies as well as building craft heritage of the region.

Commissionerate of Rural Development has already identified 2000 sqm. land for the construction of these museums in Kutch, Sabarkantha, Ahmedabad, Surat and Rajkot districts.



Lakhpat Tourism Facility



Taking the concept of community tourism from the experience of Shaam-e-Sarhad, a similar tourism facility has been developed in Lakhpat. Lakhpat is a village located on the northwest tip of Kutch district and is on the coast of the Great Rann, the white desert between India and Pakistan. It was once a flourishing town but is now impoverished. But its rich culture and architecture makes it an interesting tourism site. The objective of the tourism facility is to develop the lacking tourism infrastructure of the village with the involvement of the community in the entire process that includes, formation of a village committee, providing livelihood to the local artisans during the construction activity and finally guiding the village committee to manage the facility efficiently. The construction of the facility is complete and it will soon start catering to the tourists.



Office and Research Centre for BPUMS

The Banni grassland of Gujarat is the largest natural grassland in the Indian subcontinent, and an area that is both socio-culturally unique and ecologically valuable. Ethnic communities that comprise the “maldhari” pastoralists have inhabited this region. Their livestock graze in this landscape and the main occupation of this community is animal husbandry. Atree, a research institution in the area of biodiversity conservation and sustainable development has initiated a research program that studies the long-term impact of changing ecological patterns and social processes on the Banni grassland and the implications for its pastoralist communities.

Sahajeevan, works closely with the pastoral community with the objectives to make livestock based livelihood a viable economic option and set up an economically viable concept of grassland development. Thus came into existence the Banni Pashu Ucherak Maldhari Sangathan (BPUMS) with an aim to strengthen animal husbandry occupation in the Banni region. For further organizing this sangathan Atree, Sahajeevan and Hunnarshala came together to build an office building for the community from where various activities of the Sangathan can be performed. Hunnarshala has designed and completed the construction of the project.



Campus for Ujjas Mahila Sangathan

Hunnarshala is providing design and technical assistance for the office campus of Ujjas Mahila Sangathan in Mundra. The campus is under construction currently.





Research and Development

If we explore rural regions in India, we will find that the local people have developed and practiced many types of building technologies. The technologies are conducive to the environment of that specific region. These technologies are untapped, as not much has been done to scientifically validate them and make them available as a mainstream technology. The technical team of Hunnarshala learns these technologies from the rural region, validates them and makes them available as technologies along with the practitioners of the specific building art. The artisans of these technologies are available, hence can implement these technologies after an orientation on the research findings, whereas for sophisticated new technologies people have to undergo training. With the climate change and environmental concerns, now the technologies promoted by us are termed as green technologies.

Hunnarshala's efforts are to mainstream the use of eco-friendly building techniques that are scientifically validated through research initiatives on a regular basis. These research initiatives are of great help in innovating with the environmentally friendly materials to provide sound building solutions while retaining the traditional wisdom. The research results are properly tested for its functionality and then transferred through training programs to the artisan guild for implementing in projects.

Research Activities

Analysis and Design for Thermally Autonomous Housing in Resource-Constrained Communities

Climate specific passive cooling techniques are well known, but are rarely implemented in informal settlements because of density, lack of resources, design integration, and materials availability. This thesis is situated in the practical connection of two normally disparate parts: applied research in passive cooling techniques, and design for development. The work presented results from the establishment of an international co-design partnership between MIT and The Hunnarshala Foundation for Building Technology and Innovations.

It presents data analysis and codesign work that drove the development, field prototyping, and evaluation of appropriate, implementable building solutions to improve thermal conditions in affordable housing in hot and arid climates. New low-cost, multi-layered roof assembly designs are presented and evaluated. Experimental results show that even in severe arid climates the interior conditions can approach ASHRAE and EN 15251 Adaptive Thermal Comfort standards through most of the operating hours. The results of this research will be an important contribution to the designs of the initial phase of the large-scale Rajiv Awas Yojana Slum Free Bhuj re-development housing construction over the next five years in Western India.



Construction of test chamber



Setting up machines for thermal readings

Dewats

Hunnarshala has been associated with wastewater treatment plants and is working constantly to increase the efficiency and optimize the wastewater treating systems. It has worked on 15 Dewats systems since 2003. Consortium of Dewats Dissemination is helped Hunnarshala set up a chemical dry laboratory to test samples of treated and untreated wastewater. Now, Chemical tests can be performed on the wastewater to test B.O.D, C.O.D, Ammonia, Nitrogen, Phosphate and alkalinity of water. Physical tests can also be conducted to determine total solids, suspended solids and dissolved solids.

The samples from various DEWATS were being tested on a regular basis to generate data which shall be applied to develop systems to increase the efficiency of DEWATS.

CSEB

Hunnarshala has been making constant efforts to mainstream the use of Compressed Stabilised Earth Blocks technology. One such effort is a hydraulic press that has been designed with Gramvidya to ease the cumbersome production process, quality control and standardized production. The first version of the design was first completed and was then used to build a house. The second phase of designing of a hydraulic press for Compressed Stabilized Earth Blocks was also completed.

A hydrometer test was performed in the laboratory to generate data for different types of soils.



Collection of samples for testing (Dewats)



Production of CSEB blocks

Other Activities

Bhujio Biodiversity Conservation

The staff of Hunnarshala along with partner NGOs under the guidance of Kiran Vaghela organized an awareness program on the biodiversity of Bhujio fort for the citizens of Bhuj on 26th January 2015. The event started with flag hoisting ceremony followed by a nature walk through the bhujio hill explaining flora and fauna, and the threat they currently face due to various human activities. The citizens planted about 100 cactus plants and pledged to protect the biodiversity of Bhujio hill.



Dissemination, Workshops and Seminars

Educating the budding architects, engineers and young professionals is one of the main objectives of the artisan empowerment unit. It is imperative that the generation to come understands the context of local technologies with artisans for a more sustainable and holistic model of development. Workshops and visits were conducted by different architecture schools; BIT Mesra, LJ College Ahmedabad, Goa College of Architecture to understand Hunnarshala's work.

A group of design students from Srishti School of Design, Bangalore visited Hunnarshala to work with the slum communities of Bhuj on the slum archiving project. The students interacted with the community for an entire week to dwell upon the aspects of community life and how a designer can intervene on different levels. Students from Sushant School of Architecture, Gurgaon; National University of Singapore and Sahyadri School, Pune also visited Hunnarshala for shorter durations to understand community work.

Publications

FuturArc, a Singapore based publications on green buildings featured an interview with Sandeep Virmani for their January-February 2015 housing Issue.

People

Jan-Feb 2015



IN CONVERSATION WITH SANDEEP VIRMANI

by Bhawna Jaimini



Sandeep Virmani, architect and environmentalist based in Kutch, a district in Gujarat, India believes that the purpose of housing should be to create communities and responsible societies where each individual is not treated as just a number that needs a shelter. He has been working on the issues of water harvesting, organic agriculture and renewable energy for years in the region through setting up an NGO, Sahjeevan. He is the executive chairman and co-founder of Hunnarshala Foundation that works in the field of self-sustaining housing for the poor, involvement of artisans in mainstream building processes, and promotes the use of local eco-friendly materials and technologies. The organisation has worked in post-disaster rebuilding and rehabilitation projects in India, Indonesia, Iran and Afghanistan. The foundation is currently working in the implementation and facilitation of urban and rural housing programmes launched by the government of India. Virmani is on the committee constituted by the Ministry of Housing and Urban Poverty

Financials for the year 2014-2015

AUDITORS' REPORT

TO THE MEMBERS OF HUNNAR SHAALA FOUNDATION FOR BUILDING TECHNOLOGY AND INNOVATIONS

Report on the Financial Statements

We have audited the accompanying financial statements of HUNNARSHALA FOUNDATION, which comprise the Balance Sheet as at 31st March, 2015, the Statement of Income & Expenditure account for the year then ended, and a summary of the significant accounting policies and other explanatory information.

Management's Responsibility for the Financial Statements

The Company's Board of Directors is responsible for the matters stated in Section 134(5) of the Companies Act, 2013 ("the Act") with respect to the preparation of these financial statements that give a true and fair view of the financial position, financial performance of the Company in accordance with the accounting principles generally accepted in India, including the Accounting Standards specified under Section 133 of the Act, read with Rule 7 of the Companies (Accounts) Rules, 2014. This responsibility also includes maintenance of adequate accounting records in accordance with the provisions of the Act for safeguarding the assets of the Company and for preventing and detecting frauds and other irregularities; selection and application of appropriate accounting policies; making judgments and estimates that are reasonable and prudent; and design, implementation and maintenance of adequate internal financial controls, that were operating effectively for ensuring the accuracy and completeness of the accounting records, relevant to the preparation and presentation of the financial statements that give a true and fair view and are free from material misstatement, whether due to fraud or error.

Auditor's Responsibility

Our responsibility is to express an opinion on these financial statements based on our audit. We have taken into account the provisions of the Act, the accounting and auditing standards and matters which are required to be included in the audit report under the provisions of the Act and the Rules made there under.

We conducted our audit in accordance with the Standards on Auditing specified under Section 143(10) of the Act. Those Standards require that we comply with ethical requirements and plan and perform the audit to obtain reasonable assurance about whether the financial statements are free from material misstatement. An audit involves performing procedures to obtain audit evidence about the amounts and the disclosures in the financial statements. The procedures selected depend on the auditor's judgment, including the assessment of the risks of material misstatement of the financial statements, whether due to fraud or error. In making those risk assessments, the auditor considers internal financial control relevant to the Company's preparation of the financial statements that give a true and fair view in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on whether the Company has in place an adequate internal financial controls system over financial reporting and the operating effectiveness of such controls. An audit also includes evaluating the appropriateness of the accounting policies used and the reasonableness of the accounting estimates made by the Company's Directors, as well as evaluating the overall presentation of the financial statements. We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our audit opinion on the financial statements.

Opinion

In our opinion and to the best of our information and according to the explanations given to us, the aforesaid financial statements give the information required by the Act in the manner so required and give a true and fair view in conformity with the accounting principles generally accepted in India, of the state of affairs of the Company as at 31st March, 2015, and its profit for the year ended on that date.

Report on Other Legal and Regulatory Requirements As required by Section 143 (3) of the Act, we report that:

(a) We have sought and obtained all the information and explanations which to the best of our knowledge and belief were necessary for the purposes of our audit.

(b) In our opinion, proper books of account as required by law have been kept by the Company so far as it appears from our examination of those books.

(c) The Balance Sheet and the Statement of Profit and Loss dealt with by this Report are in agreement with the books of account.

(d) In our opinion, the aforesaid financial statements comply with the Accounting Standards specified under Section 133 of the Act, read with Rule 7 of the Companies (Accounts) Rules, 2014.

(e) On the basis of the written representations received from the directors as on 31st March, 2015 taken on record by the Board of Directors, none of the directors is disqualified as on 31st March, 2015 from being appointed as a director in terms of Section 164 (2) of the Act.

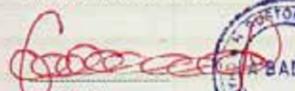
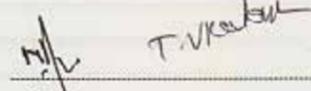
(f) With respect to the other matters to be included in the Auditor's Report in accordance with Rule 11 of the Companies (Audit and Auditors) Rules, 2014, in our opinion and to the best of our information and according to the explanations given to us:

- i. The Company does not have any pending litigation.
- ii. There are no long term contracts including derivative contracts for which there were any material foreseeable losses.
- iii. The Company has been licensed under Section 25 of the Companies Act, 1956 and has not paid any dividend till date and hence no amount is required to be transferred to Investor Education and Protection Fund.

Place : Ahmedabad
Date: 03.09.2015

For H. Rustom & Co.
Chartered Accountants
Firm Reg.No.108908

(HRD Dalal)
Proprietor
Membership No.
31368

Hunnarshaala Foundation for Building Technology & Innovations					
INCOME & EXPENDITURE STATEMENT FOR THE YEAR ENDED 31st March, 2015					
PARTICULARS	Note No.	For the year ended 31st March, 2015		For the year ended 31st March, 2014	
		Rs.	Rs.	Rs.	Rs.
I Revenue from operations	13	1,78,50,500		1,87,98,303	
II Other Income	14	97,05,824	2,75,56,324	1,39,18,698	3,27,17,001
III Total Revenue (I + II)					
IV Expenses					
Cost of Materials Consumed	15	11,42,631		25,45,608	
Employee Benefit Expenses	16	56,43,718		52,64,372	
Finance Costs	17	-		-	
Depreciation Expenses		41,33,322		28,41,278	
Expenditure on the Objects of the Organisation	18	2,57,53,456		2,05,86,174	
Other Expenses	19	33,89,987		20,01,732	
Total Expenses			4,00,43,114		3,30,39,163
V Surplus/(Deficit) before exceptional and extraordinary items and tax (III-IV)			(1,24,86,790)		(3,22,162)
VI Exceptional Items					
VII Surplus/(Deficit) before extraordinary items and tax (V-VI)			(1,24,86,790)		(3,22,162)
VIII Extraordinary items					
IX Surplus/(Deficit) before tax (VII+VIII)			(1,24,86,790)		(3,22,162)
X Tax expense:					
XI Surplus/(Deficit) for the period from continuing operations (IX - X)			(1,24,86,790)		(3,22,162)
XII Surplus/(Deficit) for the period from discontinuing operations					
XIII Tax expense of discontinuing operations					
XIV Surplus/(Deficit) from discontinuing operations (after tax) (XII-XIII)					
XV Prior Period Expenses	1		3,65,170		
XVI Surplus/(Deficit) for the period (XI + XV)			(1,28,51,960)		(3,22,162)
XVII Earnings per equity share:					
(1) Basic			NA		NA
(2) Diluted			NA		NA
Significant Accounting Policies and Notes to Accounts	1				
For H Rustom & Co. Chartered Accountants Firm Reg. No. 108908W		For Hunnarshaala Foundation for Building Technology & Innovations			
 (HRD Dalal) Proprietor Membership No. 31368		 Director			
Place : Ahmedabad Date : 03/09/2015		Place : Bhuj Date : 03/09/2015			

Hunnarshaala Foundation for Building Technology & Innovations					
BALANCE SHEET AS AT					
31st March 2015					
PARTICULARS	Note No.	As at 31-03-2015		As at 31-03-2014	
		Rs.	Rs.	Rs.	Rs.
I. EQUITY AND LIABILITIES					
1. Shareholders' Funds					
(a) Share Capital	2	1,01,000		1,01,000	
(b) Reserves and Surplus	3	14,37,36,012		15,65,87,972	
			14,38,37,012		15,66,88,972
2. Share Application Money pending allotment					
3. Non-current Liabilities					
4. Current Liabilities					
(a) Trade Payables	4	3,10,384		5,83,410	
(b) Other Current Liabilities	5	1,19,06,502		29,73,005	
			1,22,16,886		35,57,295
TOTAL			15,60,53,898		16,02,46,267
II ASSETS					
1. Non-current Assets					
(a) Fixed Assets					
(i) Tangible Assets	6	3,18,41,661		3,14,65,788	
(b) Non-current Investments	7	5,00,00,000		5,00,00,000	
			8,18,41,661		8,14,65,788
2. Current Assets					
(a) Inventories	8	1,75,404		2,37,305	
(b) Trade Receivables	9	14,78,500		12,20,699	
(c) Cash and Cash equivalents	10	4,11,62,366		5,43,61,680	
(d) Short-term Loans and Advances	11	81,73,356		58,15,650	
(e) Other Current Assets	12	2,32,32,621		1,71,45,145	
			7,42,12,237		7,87,80,479
3. Miscellaneous Expenditure to the extent not written off or adjusted					
TOTAL			15,60,53,898		16,02,46,267
Significant Accounting Policies and Notes to Accounts					
	1				

For H Rustom & Co.
Chartered Accountants
Firm Reg. No. 108908W

For Hunnarshaala Foundation for Building
Technology & Innovations



(HRD Dalal)
Proprietor
Membership No. 31368

Place: Ahmedabad
Date: 03/09/2015

M/r. T. V. Dalal
Director

Place: Bhuj
Date: 03/09/2015

Hunnarshala Foundation for Building Technology & Innovation					
Receipt & Payment Account for the Year From 1st April 2014 to 31st March 2015					
Consolidated Receipt & Payment Account of Sr No.4 & 8 & 12 & 54 & 56					
Receipt			Payments		
Particulars	Amount	Amount	Particulars	Amount	Amount
Opening Balance		27,76,970	Expenditure for the object of the Company		
			Programme Expenses		76,97,368
Income			Interest Income		
Grant Income	1,66,79,187		Programme Expenses	54,86,968	
			Programme Staff Cost	21,68,766	
			Programme Admin Cost	41,634	
			Establishment Cost	858	
			Bank Charges	858	
			Capital Expenditure		71,740
			Laptop	45,750	
			LED Projector	25,990	
			Closing Balance		1,20,23,910
			Bank Balance	1,12,55,640	
			Cash-in-Hand	16,071	
			Investment - FDR	7,00,000	
			TDS Receivable 2013-2014	27,697	
			TDS Receivable 2014-2015	33,447	
			Pre paid Insurance	473	
			Accrued Interest on FDR	40,163	
			Accrued Interest on FFD	1,15,971	
			Sahjeevan	-24,269	
			TDS on Commission	-358	
			Payables	-1,19,859	
			Providend Fund	-20,238	
			KMVS	-11	
			Hunnarshaala - Non FCRA	-500	
			Madhavrey Pani Samiti	-317	
Total		1,97,93,876	Total		1,97,93,876

For: Hunnarshala Foundation For
Building Technology & Innovation

For: H. Rustom & Co.

M/r. T. V. Dalal
Director

M/r. T. V. Dalal
Director



Chartered Accountants
Firm Reg. no. 108908W

(HRD Dalal)
Proprietor
Membership No. 31368

Place: Ahmedabad
Date: 03/09/2015

Place: Bhuj
Date: 03/09/2015

Team

Board of Directors

Neelkanth Chhaya, Chairman
Sandeep Virmani, Executive Vice Chairman
Mahavir Acharya, Managing Director
Tejas Kotak, Executive Director
Kiran Vaghela, Director
Tushar Dayal, Director
Sudhin Choksey, Director
Prof. Jagadish Kaup., Director
Ramesh Sanghvi, Director

Management Committee

Sandeep Virmani, Executive Chairman
Mahavir Acharya, Managing Director
Tejas Kotak, Executive Director
Prajesh Jethwa, Business Manager
Nilam Sompura, Administration Manager
Chetna Varu, Accountant
Atul Vyas, Artisan School Coordinator
Mukesh Tank, Design Unit Head

Administration Division

Dhaval N Raval, Admin Assistant
Rajesh S Gor, Admin Assistant
Uravashi Anjaria, Admin Assistant
Jamanaben Rathod, Office Assistant
Sitaben Buchia, Office Assistant
Alimamad Sama, Driver

Artisan School

Hiralal Suthar, Carpentry Instructor
Pangu Singh, Walling Systems Instructor

Accounts Division

Kartik Mehta, CA, Consultant
Brinda Khiera, Account

Community Empowerment Unit

Dhiraj Thacker, Project Assistant
Dinesh Charan, Project Assistant
Hiren Gohil, Project Assistant
Karamshi L. Rangani, Project In Charge
Khimji G. Chavda, Project Assistant
Malaram Bishnoi, Project Assistant
Ramesh Chauhan, Project Supervisor
Rupesh Hurmade, Project In Charge
Hardika Dayalani, Project Coordinator
Bhawna Jaimini, Project Assistant
Aditya Singh, Architect
Tapas Upadhyay, Architect
Prateek Zaveri, Architect

Artisan Empowerment Unit

Bharat Chauhan, Assistant Supervisor
Jignesh Gor, Project In Charge
Pradip Rangini, Project In Charge
Raj Chauhan, Project Assistant
Meghji Bhuchia, Care Taker
Hemant Dhudhaiya, Project In Charge
Milap Gor, Project Supervisor
Vishanji Gajjar, Master Artisan
Poonam K. Chavda, Store In Charge

Interns

Nipun Prabhakar
Anuja Bhandari
Sanjana Ravi
Shail Joshi
Nikhil Shah
Bibilal Vijay
Tanvi Aggarwal

