SOWING SEEDS OF RESILIENCE

SEEDS Annual Report | 2016-17













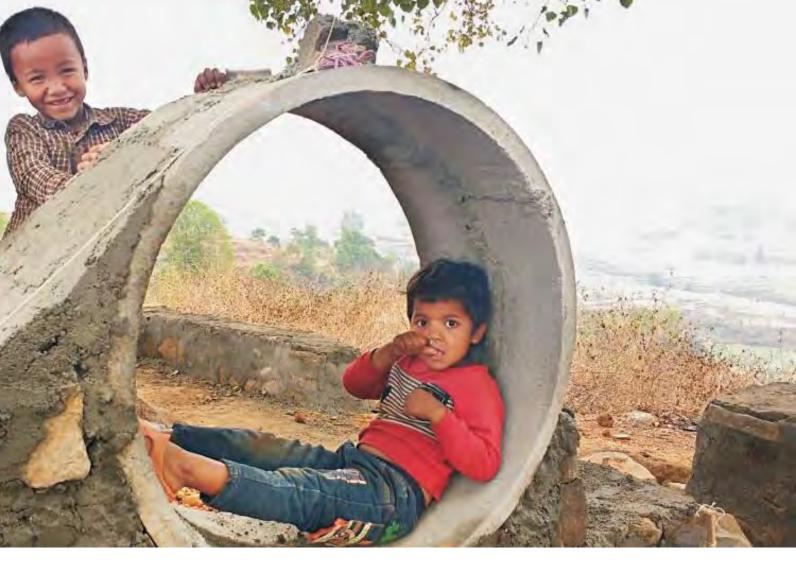
Dear Friends,

This last year, a focus on underlying vulnerabilities and day to day stresses took the fore. It has really showcased experiences of sowing seeds of resilience.

Access to clean water was a recurring theme across programmes, from our response work for the Maharashtra drought to rainwater harvesting in our resilient village programme in Kathua, Jammu and Kashmir.

Our continuing early recovery work in Nepal, Uttarakhand and Chennai all adopted components of these day to day risks as part of our programmes, working with affected communities on water, sanitation and hygiene as well as disaster risks.

Everywhere, we've seen how this is a starting point for.communities to come together and take the lead. This was exemplified in our East Delhi programme where a highly heterogeneous set of people moved from 'i to we to our' through their community-led action

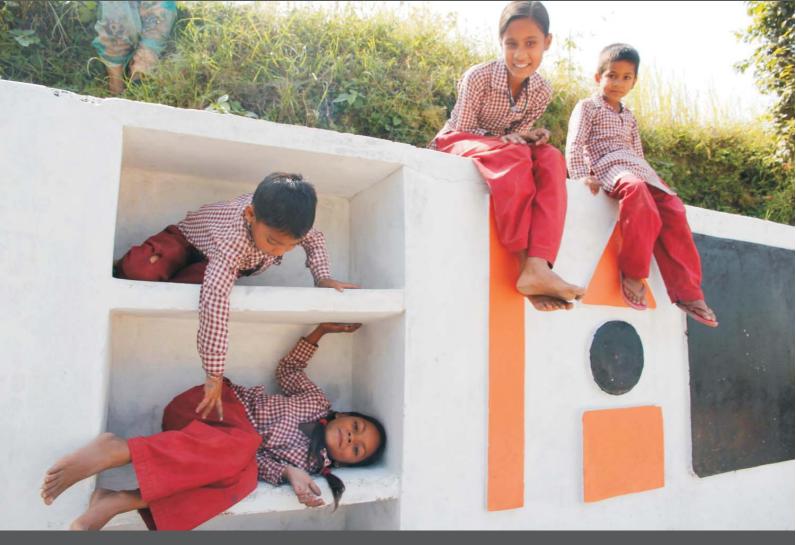


Across programmes, SEEDS has maintained close partnerships with key government institutions and the private sector, based on a joint approach to addressing problems.

We thank all our donors, partners, volunteers and friends and who have extended their generous support. It is your trust and the overwhelming response from the communities that we serve that allows us to continue working towards a safer and more sustainable world.

With warm regards,

Manu Gupta Executive Director



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AWARDS

- Drukpa Award 2011 (for rehabilitation work in Ladakh)
- UNFCCC 2013 Momentum of Change Lighthouse award (for community-based micro climate resilience project in Gorakhpur, Uttar Pradesh)
- 'Catalysts of Change Ladakh' awarded best film in the Climate Change Adaptation category at Asia Ministerial Conference for Disaster Risk Reduction (AMCDRR) 2016
- GuideStar India NGO Transparency award 2016 (Gold Level)
- Recognised as Sendai Target Champion for reducing disaster mortality by UNISDR (for work on affordable and safe housing)

ACCOUNTING SYSTEMS

SEEDS (Sustainable Environment & Ecological Development Society) was incorporated on January 31, 1994 as a voluntary organisation under the Societies Act 1860. SEEDS is registered under Section 12A of the Income Tax Act, 1961 of India. SEEDS also receives foreign contributions and has been granted registration under Foreign Contributions Regulation Act (FCRA). The permission is valid uptil 2021, after which the renewal will be done again.

SEEDS undertakes various projects, so the accounting is done project wise. SEEDS maintains three separate set of books of accounts as: First set of books to comply with the requirements of Foreign Contributions Regulation Act and accounts for contributions & expenses on foreign contribution projects; Second set of books for local projects and office overheads and Third set of books for International Projects.

Besides compliance under various Accounting Standards issued by the Institute of Chartered Accountants of India, SEEDS also maintains its accounts as per the requirements of donor organisations. SEEDS financial year commences on April 1 of every year and ends on March 31 of the subsequent year. It follows accrual basis of accounting. We have a centralised accounting system maintained at the Head Office.

An independent auditor audits all accounts of SEEDS every year. As per law, SEEDS submits yearly statement of Foreign Contributions to the Ministry of Home Affairs. We also submit yearly Income Tax returns to the Government of India along with Balance Sheet covering all projects and activities. Close monitoring of all project budgets is done based on the monthly reporting of expenses and progress of projects.

BOARD OF DIRECTORS

Dr. V. K. Sharma - President

Dr. Manu Gupta - Vice President

Dr. Anshu Sharma - Secretary

Prof. J.H. Ansari - Member

Mrs. Manjusha Gupta - Member

Prof. Rajesh Bheda - Member

Dr. Rajib Shaw - Member

Dr. R. Kuberan - Member



VISION & APPROACH

VISION

Resilient Communities

MISSION

Equipping the most vulnerable with appropriate tools and technologies, sharing knowledge and skills and promoting linkages among stakeholders to prevent loss of life and suffering.

GUIDING PRINCIPLES

- Prompt in our action
- Identify and reach out to the most vulnerable
- Facilitate community participation in decision making
- Adapt to local and cultural environment
- · Non-discriminatory in our approach
- · Focus on individual
- · Promote excellence

SEEDS IS A MEMBER OF AND SIGNATORY TO:

- The Code of Conduct for The International Red Cross and Red Crescent Movement
- · SPHERE Standard in Humanitarian Aid
- The International Council of Voluntary Agencies
- Asian Disaster Reduction and Response Network (ADRRN)
- Active Learning Network for Accountability and Performance (ALNAP)
- Core Humanitarian Standard (CHS) an international certification system for quality and accountability in disaster relief.



OUR APPROACH

From our humanitarian response and early recovery programmes to reconstruction, training and innovation activities, SEEDS takes a long-term and inter-connected approach to its work.

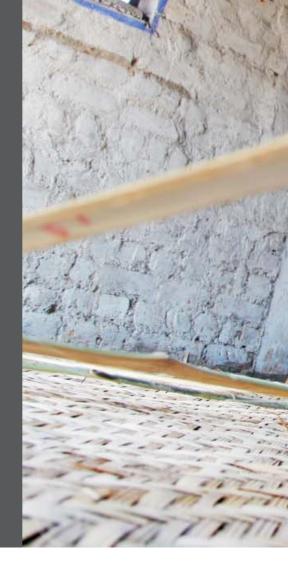
SEEDS takes a broader and integrated approach to ensure maximum impact. Our housing and school construction projects are all customised and look at key related elements. As appropriate this includes elements around clean water, sanitation access and hygiene; livelihood enhancement; behaviour change and awareness campaigns; and mason training.

We push the use of local (and where possible natural) materials and integrate modern disaster resistance techniques with traditional practices. As appropriate, this has included bamboo, wood, stone, mud, CGI sheeting, traditional grasses and often the use of salvaged material in the aftermath of a disaster. This approach of melding with the local culture, rather than importing foreign materials, helps decrease the carbon footprint and has social benefits.

Responding To Affected Communities

Asia, the most disaster prone continent, experienced more than half of the world's major disasters in the last half century. SEEDS acts with urgency to save lives and get affected communities back on their feet. We focus on emergency tents and early recovery housing as the situation demands. Related non-food items—utensils, blankets and essential hygiene items are also addressed. This is carried out with due regard for human dignity, respect for local cultures and values and accountability towards all stakeholders.

Perhaps most importantly, we aim to start the recovery and reconstruction process from the very first day. Through it all, SEEDS continues to contribute and advocate for better coordinated and improved quality of response at all levels.



Building Back Homes

The reconstruction process is an opportunity not just to restore what was lost, but to help the community better withstand future disasters. Once the immediate humanitarian response is over and the disaster is no longer in the news, communities are mostly left to recover alone. Families cannot survive in tents alone until government schemes materialise. Rather than risking unsafe rebuilding, SEEDS' works with the most vulnerable families to create transitional shelters. These follow cultural norms, often using materials that are local. They incorporate disaster reduction techniques. These homes are the foundation towards permanent housing.

Our sustainable housing model refers to shelters that are culturally apt, environmentally suitable, safe and secure. Continuous engagement with emerging architects and engineers on indigenous designs and technologies complements this approach. Bridging the gap between knowledge and practice, SEEDS also trains local masons and construction workers on retrofitting and safe construction practices.

Rebuilding Schools and Educating for Disaster Preparedness

Disasters cause disproportionately high damage to school infrastructure and re-establishing education is one of the key priorities. For a school is more than a building. It's a place for children to learn, to play, to be safe, to be inspired and to grow. In the aftermath of a disaster, it is also one of the most important ways for them to heal. Our efforts are not just to rebuild, but to upgrade school buildings. Existing school structures are strengthened through retrofitting. For safer schools mean safer communities.

This is complemented by school safety and preparedness initiatives. The programme works to ensure that the school community is better equipped to respond and involves the neighbouring communities. This includes training on life saving skills, effective response and the development of school disaster management plans. SEEDS also works with frontline workers to build their capacity to deal with and respond to disaster risks.



Helping Communities Adapt for Resilience

Often communities face multi-faceted problems that require a pre-emptive approach. Growing impacts of climate change, unplanned urbanisation and underlying risks add to this vulnerability. SEEDS is committed to empowering local communities to better withstand these risks; making them leaders in building their own resilience. This overall resilience perspective includes elements such as adapting for livelihood security; managing and mitigating financial and environmental risks; access to clean water; and advocacy for change.

Community-led forums have brought together people from various walks of life to take up neighbourhood issues and advocate with local governments for change. These forums act as a collective learning and action hub to reduce day-today stresses. They also create an enabling environment to strengthen government-citizen partnership.

Imparting Skills to Build Safely

Bridging the gap between knowledge and practice, SEEDS trains local masons and construction workers on retrofitting and safe construction practices. This is done onsite during reconstruction programmes and through the SEEDS Academy. It imparts fundamental skills and knowledge of disaster-resistant techniques to construction workers. The SEEDS Masons Association, which began in Patanka after the Gujarat earthquake is slowly expanding. Members of SMA have since worked on our reconstruction projects in the Andamans, Kashmir, Bihar, Ladakh, Nepal and Tamil Nadu.

Partnering and Innovating for Change

Understanding local knowledge and broader trends is essential to apply fresh input to on-ground projects. SEEDS' programmes are supported by strategic partnerships and innovative action research. It cooperates and networks with allied groups for knowledge exchange and to reach out more broadly. At the same time, it conducts research and experiments with innovations.

NEPAL EARTHQUAKE EARLY RECOVERY

The catastrophic earthquake on 25th April, 2015, left Nepal with a trail of destruction. In the last part of our early recovery activities, SEEDS completed activities in Dhading one of the worst affected districts. Our interventions around shelter, schools and community infrastructure have helped bring back a sense of normalcy to affected families.

Transitional Schools

In order to help continue education and reduce dropouts, the four transitional schools being reconstructed across the district were completed this year. The modular design used a pre-fabricated MS tubular structure, a combination of poles and trusses with CGI roof and infill walls. This not only helped the construction to be quick and cost effective but also easy to transport. That was important as roads were non-existent and construction material had to be carried manually. Complementing the physical, child-friendly spaces, school learning kits were also supplied including writing boards, stationery, games and learning material for children.

Transitional homes and toilets

As with other areas across Nepal, the transitional shelter process here was entirely owner driven. At least one member of the family had to undergo training and orientation on the construction process. A simple yet highly-engineered design empowered people to build themselves with oversight from the technical team. The use of locally available and ecofriendly materials meant they could also be reused later on; saving on environmental costs. This includes bamboo, CGI sheet, GI wire, mud and stone.

Families were also provided with solar lights, floor mat and blankets as part of winter support. Where toilets had been destroyed, simple and usable transitional toilets were built alongside the homes.





Community infrastructure

People across Naubise were grappling with the shortage of drinking water. Following the earthquake, roads had shifted and natural springs were damaged beyond repair. With the help of community members, two underground water reservoirs were constructed. Labour, stone and basic raw material for construction was provided by the communities. One falling on the national highway has a filter attached and caters to travelers as well. The other smaller one caters to the surrounding families.

Two community sitting spcaes, designed and built by the community, now serve as common hubs to rest, gather, discuss and play!

An internal road in Ward 4, Parigaon, Naubise VDC had completely been destroyed. This was a critical pathway linking to the main cement road and important as an evacuation route. Around 220 mtrs of road with an average width of 1 mtr was constructed. With community involvement, the road was leveled, excavated and laid with stone, aggregate and cement mortar.

Spreading awareness and changing behavior

Public awareness campagins on solid waste, handwashing and safe water handling were carried out across the intervention areas at cluster level. A main committee twas formed and trained at the Naubishe level was Naubishe VDC level with community-led clusters working under them. This system was institutionalized and mainstreamed as per the norms of Government of Nepal.

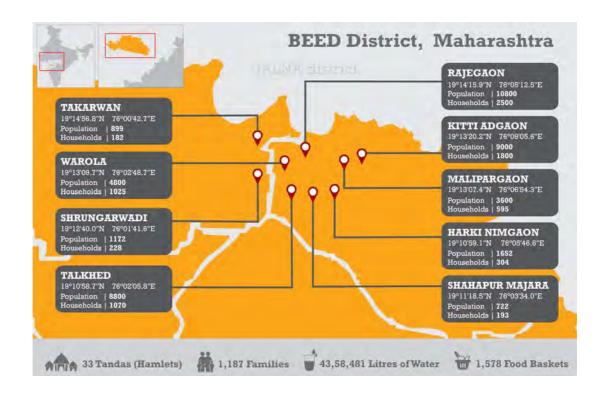
MAHARASHTRA DROUGHT ASSISTANCE

EVERYTHING STARTS AND ENDS WITH WATER

In the summer of 2016, over 15,000 villages covering almost half of Maharasthra's districts were declared drought-affected. Ruined harvests and devastated livestock was rife. As pipes and wells ran dry and temperatures soared, water was a necessity to survive.

Beed district, an area where SEEDS had intervened in earlier emergencies, was chosen as a focal point. The identified 9 villages of Majalgaon block, had large marginalized populations living on the outskirts and were out of the radar of ongoing relief operations. Between May and July 2016, SEEDS reached out to 1887 families and 9426 people with water aid. A total of 43,58,481 litres of water was distributed throughout this time.







The families were list of families was obtained from the village Panchayat and village ICDS (Integrated Child Development Services) centre. The details were then triangulated through community meetings. Orientation to families on quantity of water being provided and its distribution mechanism was provided.

A number of different water sources were explored before narrowing down based on the water quality.

Volunteers produced daily water reports specifying the quality of water before distribution per tanker. These reports were further verified by panchayat at supply location. This process of dual testing at source and distribution continued throughout the initiative for every tanker, ensuring no contamination took place during the transportation.

With this timely intervention, families were spared from the constant struggle and long treks to find water. In many cases, families who were on the verge of migrating were able to remain at home!





ENSURING AVAILABILITY, ACCESSIBILITY AND QUALITY

Optimum quality and quantity: The quantity of water provided per family took place according to WHO and SPHERE standards of 15 litres per person for both drinking and hygiene needs. Anyone above 6 months of age was considered an individual to ensure equitability in large families.

Potability: Water testing was done at the primary source and also before distribution to ensure no contamination. The tests included turbidity, TDS (total dissolved solids), E-coli (bacteriological testing) and residual chlorine.

Tanker spread and distribution points: Tanker spread and distribution points were selected extremely carefully to allow for equitable and easy access. In most areas, this ensured that it was within 500 metres of the furthest family.



Transparent distribution: The comprehensive approach took into account the logistical, social and behavioural elements of water distribution. A strong volunteer network played a key role. They helped communicate information and carry out the entire distribution process in a very systematic and organised manner, maintaining transparency. Systematic tagging of all families was done through water distribution cards, helping avoid duplications and wastage. This proved vital to maintain records, both for the individual family as well as for the SEEDS team.

Reaching the Unseen: Within these drought-affected villages themselves, there were families who were going unheard and unseen. Emphasis was laid on the inclusion of marginalized families who too often didn't even get to join the queue.

Promoting hygiene practices: WaSH committees were formed at Tanda (hamlet) level to make the entire water distribution process community-driven (with communities overseeing the process). This helped to increase ownership with better resource management, increasing effectiveness of the services. Women played a critical role in these committees, ensuring outreach to the last mile. One of the other crucial functions of the WASH committees was to promote safe hygiene practices like hand washing techniques and curbing open defecation. Both at schools and in the communities, safe hygiene practices amongst children were carried out in various schools.

Complaints and Response Mechanisms: CRM boxes were established and installed in each village. The feedback provided helped make changes as per emerging needs. Much of this centred around the increase in numbers of family members. As people who had migrated returned, this issue became more pronounced. These families were asked to write to the head of the village and after verification through community meetings, the additions were included. Suggestions were also received to increase the number of days of water distribution.



Nobody takes us for labour work anymore as there is no water. I have even slept with an empty stomach and no water for many nights.

52-year-old Vimal Ganapath Rathore from Malipargaon village, Beed



EMERGENCY NUTRITION

As crops fail and families lose livelihoods, the lack of nutrition can be One of the main impacts of a drought is not just the lack of water, but the lack of nutrition, particularly for the most vulnerable families.

Food baskets with locally appropriate items were procured and distributed. This contained 5 kgs of jowar (white millet), 10 kgs of rice (parboiled), 1 kg of daliya (broken wheat), 2 kgs of Toor dal, 1 kilo of iodised salt, 1 kg of jaggery, 2 kilos of soya bean nuggets and 1 kg of fortified soya bean cooking oil.

Food baskets were distributed in the villages where water supply was ongoing and based on the core need, Malipargaon was also added. Each family was provided with one food basket. In all 1578 families were reached with emergency nutrition.

Just like the water card, a food card served us a vital tool for maintaining records and carrying out the distribution in serial order. Families were oriented on nutritional content and efforts were made by the field team to take feedback from the families.

REBUILDING CHENNAI

The non-stop torrential rains in two consecutive spells in month of November and December 2015 brought the urban life of Chennai to standstill. Over 400,000 people in Chennai were affected by the worst flooding witnessed by the state in last 100 years.

Madhavaram, a northern suburb on the outskirts of town, was one of the most affected. Unlike other slums in Chennai, this community had received little assistance from the government. Largely from marginalised communities (scheduled castes), families here primarily earn though daily wage labour.

Homes here were mainly thatch huts that had weakened with the long-standing water. Some had collapsed completely and those standing were filled with muck, making it inhabitable. Yet, with nowhere else to go, some families were actually still living in the water. 200 of the most-needy families were selected with an emphasis on women-headed households, people with disabilities, the elderly and those truly unable to recover on their own.



Blending rural and urban sensibilities in design

However, the unique blend of rural and urban sensibilities made it a challenge to design and construct safe transitional homes that met the needs of the residents. It had to be quick to build, low-cost and comfortable to live in. At the same time, the tight spaces meant that each home had to be customised in size according to the land available with the family. Market surveys were done to assess available local resources and skills. Based on this, the design process was carried out.



Pre-fabricated elements of RCC pillars and ferro-cement panels were incorporated to quicken the process. The walling options went through several changes. In the first round of designing, a bamboo strip walling was adopted, along the lines of previous interventions in other parts of the country. This didn't find acceptance here as mud plastering was required; a practice uncommon to this community. The walling design then changed to wooden planks. This was socially acceptable, but ran into issues due to the moisture content in the air. The planks began bending causing gaps to appear. The final design used bamboo mats sandwiched with plastic sheeting. This lightweight alternative required no plastering and was conducive to the climate. The bamboo mats were procured from Kerala (for higher quality) and the actual walls were assembled in a workshop locally.



Encouraging Local Entrepreneurship

Yemen became a leading force in the pre-fab pillar construction. Despite the lack of formal business training, he always had the inclination to make it on his own. After his father's demise, he was forced to discontinue his MSc to take care of his family. It was at that time that he began a small plastic moulding enterprise that slowly grew.

Over the last 20 years, Yemen's family had also been deeply involved in trying to help members of their community. They run a free night school in Ambedkar Nagar, one of the poorest clusters in the area, trying to improve the abysmal educational record and high dropout rate. It is in this capacity that he was linked with the Madras School of Social Work. During the post-flood survey and relief distribution phases, he played a key role.

When the housing stage began, Yemen took the initiative to try fabricating RCC pillars on his own, even before he was offered a contract. Since it was also moulding, he was sure he could handle it and wanted to prove himself and help his community. He invested in a wooden mould and brought in people with RCC experience. On seeing and judging his quality, SEEDS gave him a small order that slowly grew to finally cover 180 houses. Yemen later invested in steel moulds as well. His team of four when they began had expanded multi-fold as the order grew. Post-this experience, his name in the RCC business has spread. He has kept five core workers, two of whom are from the Madhavaram community. Several orders have already come in and he is confident that this will grow further.





A cleaner and healthier Madhavaram

Aside from the houses, larger outreach activities around hygiene promotion, safe drinking water and refurbishing of a school were carried out as part of SEEDS' overall initiative. These activities touched the lives of over 2400 families across the 13 clusters where the interventions took place.

Each of the 200 selected families has been provided with a water purifier when they complete their new house. It works without electricity, has a long life and is easy to assemble and clean. As a spin-off impact, the filter can also save families money, cutting out the cost of can water that they would buy from the market.

The main source of water in the area is the supply from the Chennai Municipal Corporation into tanks on the street corners. When tested, it was shown that this water had oral contamination. The transportation and unclean tanks were the key sources of this contamination. So the practice of 1% mother solution chlorination was promoted and has caught on.



WASH committees were set up in the different clusters. They were trained on various aspects of hygiene and played a key role in disseminating information further to the community. They also oversaw chlorination, street and drainage cleaning initiatives. The committees consist primarily of women. Men and adolescent involvement was tried, but did not prove viable in this community. The WaSH committees still meet once in 15 days. They discuss any major issues and also continue to oversee water purification and street cleaning activities. More informally, these meetings serve as a forum to help each other on a personal level where needed. When someone falls ill, for instance, they actually contribute money for treatment or offer advice to one another on a wayward family member.





The third element of the hygiene activities was around repairs in PNSS school. Run by a trust and semi-aided by the government, the school was in dire need of some repairs. The girls, boys and teachers' toilets were refurbished with tiles and a hand washing area was constructed. Additional taps, tiling and slabs made the drinking water facility more child-friendly. Finally, the kitchen and mid-day meal seating areas underwent an upgrade. The kitchen was painted and the floors and walls were tiled. The corridor where the children eat their meals was also tiled; and a slab constructed as a serving space.

Aside from the school improvements, colourful wall paintings on hand washing now adorn the entrances of community toilets in the neighbourhood.





UTTARKHAND SCHOOL RECONSTRUCTION

Following the devastating floods of 2013, five damaged schools were rebuilt as part of reconstruction efforts - Govt. Primary school, Dangi Gunav; Govt. Primary school, Ganganagar; Govt. Primary School, Huddu; Junior High School, Sitapur; and Govt. Primary School, Phali Phasalat. Due to the damage suffered by these school buildings, school authorities were forced to hold classes either in damaged buildings, putting children's lives at risk, or in the open. Each school served communities not only from the village they were located in, but also communities from neighbouring villages. It was considering their remote locations and the need of the communities that they were selected for reconstruction.



A place to learn

Proper learning spaces equipped with necessary facilities were provided in the limited space available for construction. Slits were provided in the wood ventilators near the roof level to permit additional ventilation to the class rooms. The schools were completed in 2016 and they were handed over to the education department in October of the same year. Each school was provided with a drinking water facility, play equipment, firefighting equipment and search and rescue equipment. Wall paintings were done in each school to brighten up the learning environment and to serve as teaching aids. The innovative designs provided the education department models for replication and were being considered by engineers of the department for replication.

A place to play

A small play area was created for each school. This play equipment built in the schools was made using waste material, demonstrating the recycling of waste. The inclusion of indigenous approaches and regional play methods of children as tools for DRR based activities proved helpful. Not only in approaching the children but also gaining trust and promoting easy understanding among teachers and parents.

A place to be safe

In addition to the IEC material and provision of equipment, each school went through a series of orientations on basic do's and don'ts covering aspects like hazards, daily risks, hygiene and good practices. These sessions were taken with students, teachers, non-teaching staff and parents. A children's club was also formed to raise student's issues regarding safety and security. Further lifesaving forces (Search and Rescue, First Aid, Fire Safety) were also formed in the neighbouring community with the help of youth volunteers, SMC members and panchayat body. The community inclusive approach of shared responsibility towards creating a safer environment for children provided a sense of seriousness among the community members. This helped monitor not only the school construction but also helped maintain the quality output of other on-site activities.



NAVED-E-SEHER: JAMMU & KASHMIR FLOOD RECONSTRUCTION INITIATIVE

The floods that affected Kashmir in September 2014 resulted in the damage of a number of buildings in the state, including school buildings. As a result, the school authorities were left with limited or no space to hold classes, forcing them to teach from makeshift spaces or to close down the schools. The inadequacy of learning spaces and the urgent need to rebuild schools was perceived by SEEDS during relief work carried out in the aftermath of floods, as well as discussions with communities and the education department. Two primary schools, Gulab Bagh Wani Battoo and Hajibal, located in Pulwama district, were selected for rebuilding. These schools were the sole educational facilities for the adjoining communities and damage to these schools deprived them of the facility.

While the construction took place in the previous year, formal handover to the education department was done. The schools were also provided with furniture as this had been ruined during the floods.





BUILDING RESILIENT ECO SYSTEMS IN KATHUA, JAMMU AND KASHMIR

Kathua district lies in the south-west of Jammu & Kashmir. After a comprehensive assessment of four villages - Buddhi, Mearth, Nanan and Nagrota recurring sustainability and resilience issues came to the fore. As one of the largest in the district Buddhi was chosen as a model village. Physical development in the area of repair of schools, water resource management and sanitation was of priority. At the same time, community mobilisation and awareness around environmental sustainability issues was extremely low.



Keeping inter-connected risks in mind, a two-pronged initiative was conceived. At its core was the creation of a safer learning environment through repair of school buildings and toilets and encouraging water harvesting mechanisms. Using a local government school as the fulcrum allowed for the demonstration of these techniques to the larger community, keeping children at the centre. The second was a larger awareness, mobilisation and trust building component. This engagement with the wider community helped increase knowledge on environmental sustainability.

Repair And Restoration of the Govt. High School, Buddhi

Govt. High School, Buddhi was in poor condition. With little maintenance over the years, seepage and water damage had badly affected the buildings. Toilets were broken or inaccessible, with open urination being a common occurrence. 517 students of this school were studying in a suboptimal learning environment.

A monitoring committee was formed for overall supervision of the school initiative, with representatives including the school principal and teachers, local leaders and active community members. This not only helped in monitoring the work progress and quality but also in maintaining transparency. With Buddhi being a small village, the monitoring committee was also instrumental in advising on qualified local contractors and identifying local vendors as per construction material needs!

In-depth technical assessments of the school building revealed greater damage than envisaged. The school buildings were largely load bearing structures built with brick masonry in mud mortar with cement plaster on the surface. The plaster was hollow as it had given way from the walls.



The school premises had six blocks which accommodated a principal room, administration and staffrooms, labs, library and classrooms. The restoration covered all six blocks of the school (named A-F for easy identification). Aside from the external and internal wall plastering, roof repair and waterproofing that was common to almost the blocks, some had some unique challenges or interventions that were added.

Rain water harvesting

Kathua falls into the Kandi region, where despite being a water surplus district, water shortages plague the community. Not only are water management processes inadequate, but deep water levels, reduced seasonal and long-term discharge and poor water quality add to the problem.

The case was no different in the school, which had scarce access to water even for secondary purposes. The installation of the rainwater harvesting mechanism was an opportunity to help resolve this problem, while also showcasing environmentally sustainable practices to the larger community.



However, since rain in the area is generally limited to 2-3 months and percolation in the school premises is limited, water supply would quickly dry up. So the harvesting system was designed to ensure that it is fed by dual sources both rain and the local pond to make it functional all-year round. Rainwater pipes were installed on the roof of Block B and additional pipes connected to the pond.

The water passes through a filter comprising layers of stone gravel, charcoal and sand. The filtered water is then collected in an underground storage tank with a capacity of 10,000 litres. The tank itself is designed with a skylight, using solar light purification techniques to seize growth of any insects, mosquitoes or algae.

Drinking Water Facility

In response to the clear need of the school community, a drinking water facility was also constructed. This involved repairing the unhygienic water sourcing area (on the outer wall of school), a proper filtration system and construction of a drinking water area with basins. The waste water from the drinking areas was also linked to the newly built recharge pit.

Reaching out to the community on environmental sustainability

The involvement of the broader community in managing available resources was negligible. Along with the structural interventions, attitudinal shifts were clearly essential to sustain any intervention. Promoting participation and ownership could help reduce dependence on the local government and inculcate a habit of managing community assets themselves.

A total of 40 workshops were therefore organised, covering issues of water, sanitation, hygiene, waste management, disaster risk reduction measures and environmental sustainability.



Disaster preparedness workshops with school children focused on dos and don'ts for earthquakes, basics of first aid and search & rescue techniques. The children themselves carried out street plays in multiple locations around the village to generate broader awareness. The trained senior children also passed the knowledge on to students in class 8 -10, helping the school retain the techniques within future batches.

Sessions with school teachers and administration included in-depth information on various facets such as inculcating hygiene practices into their routines, maintaining cleanliness of water sources, curtailing open defecation and carrying out solid waste management at the school level.







SOWING SEEDS OF INSPIRATION

















PARTICIPATORY COMMUNITY-BASED DISASTER RISK REDUCTION APPROACHES

Varanasi, one of the most historical cities in India, has experienced small to medium level disasters in the past. However, based on the survey conducted by Kyoto University and Banaras Hindu University, the future disaster risk will be higher due to climate change impact and the city's vulnerabilities from narrow roads and insufficient drainage systems; and most importantly, the lack of knowledge and capacity to coop with disasters at community and local government level.

As part of the Kyoto Varanasi Partnership Agreement, SEEDS is enhancing the knowledge and capacity of schools and societies to coop with natural disasters in Varanasi.



Climate Schools based on weather data

In the previous year, extensive DRR education programmes, including school/town watching, were provided to Climate School teachers. This year, CS teachers provided DRR education training to neighboring schools based on what they learnt to disseminate the importance of DRR/CC education further in Varanasi city. Thanks to the motivated CS teachers, there was an in increase in self-study and DRR activities among the climate school students.

Development of community-based DRR model through Citizen Forums

A model of community-based DRR has been promoted by establishing five Climate Schools as focal points of DRR / CC education, and five Community Forums in each of their areas. Training sessions around first-aid, firefighting, WASH and climate/weather were conducted for the communities in order to make a practical DRR plan in collaboration with National Disaster Response Force (NDRF). As a result of these trainings, preparedness for the heat wave and monsoon such as checking drains and DRR equipment were implemented by the community forums in Varanasi city.

Study visit to Japan

The establishment of a DRR Activities Promotion Center is planned in the project which can disseminate weather/climate information and DRR education/tips to people in Varanasi city. NDRF and Climate School teachers who can be core members of this, were invited to Japan to learn about community-based DRR initiatives in the country.



PARTNER FOR RESILIENCE STRATEGIC PARTNERSHIP (PFR)

The PFR promotes Integrated Risk Management (IRM), a multi-disciplinary approach combining disaster risk reduction, climate change adaptation and ecosystem management and restoration at the same time. The alliance promotes application of Integrated Risk Management (IRM) to strengthen and protect livelihoods of vulnerable communities.

Over 2016-17, this strategic partnership helped build our capacity on specific policy, investment and practice domains as a means to enhance implementation of IRM. We worked towards developing the Pfr SP India Programme and create mutual understanding and knowledge amongst the partners on its key aspects before the actual roll out on the ground. Intense training workshops were run on various types of policy influencing approaches, lobby & advocacy, monitoring and dialogue capacity framework.





BUILDING RESILIENCE OF DISASTER-AFFECTED FAMILIES IN SAHARSA, BIHAR

Sonbarsa block in Saharsa district is prone to recurrent disasters, particularly flooding. Continuing from last year, work on building resilience continued in the 10 most vulnerable hamlets, benefitting over 16000 people.

Provision of Safe Water through installation of water filters at community level

Access to clean and safe drinking water was a challenge with the high arsenic content. The installation of five Terra filters Water, designed to remove turbid particles, microorganisms, iron, color & bad odor from raw water is protecting the community from water-borne diseases. The multi- layered filtration systems were based on the IMMT Bhubaneswar design and adapted to the requirements of the local communities.



Bamboo artisans and masons, which used to be one of the major occupations, is slowly eroding through the lack of knowledge. 91 masons were trained under the project covering basic principles, bamboo treatment, safe construction practices and hand-on joinery. The enhanced skill of bamboo masons has increased employment prospects and enabled them to earn a better livelihood. Some of these trained masons were further employed by SEEDS in Tamil Nadu after Chennai Floods.

Established grain banks are helping ensure the community sustains in times of crisis and to manage nutritional requirements. They are run and managed entirely by the women of the community. This has increased their involvement in the process of the community's wellbeing and given them a sense of empowerment.







MASON AND PLUMBER TRAINING PROGRAMME (STEP)

The last part of the Support to Training and Employment Programme for Women (STEP) programme was completed this year. There were two relevant and demand based courses of assistant mason and plumber general (helper). The modules were designed after a thorough assessment for the skills required and needed in the market. The process of identification was done through door-to-door visits and community focus group discussion meetings after which both experienced and novice women were enrolled.

With the focus on enhancing the skills of women construction workers and encouraging their engagement in the sector; SEEDS Academy through support from Ministry of Women and Child Development, GOI completed Plumbing and Assistant Masonry courses training courses in October 2016. The courses were aligned with the National Occupational Standards as per National Skill Development Corporation and National Skill Qualification Framework.

Job placement was another insistent attempt of the Academy, enhancing income and subsequently the quality of life. At the same time, this was an effort to instill confidence and a can-do attitude among women who had doubted themselves for a long time. It has been the determination of women of these women that marked the success of the programme.

DELHI URBAN RESILIENCE PROJECT

The Delhi Urban Resilience Programme was about informed citizen-led action to improve the resilience of high-risk East Delhi communities.

East Delhi is an urban conglomeration- one of the most densely populated districts in Asia. The district is characterized by unauthorized settlements, with migrating populations, un-engineered buildings, lack of adequate services, water and sanitation issues, encroachment problems and issues pertaining to rapid urbanization. Besides these stresses, the community is threatened due to flooding, earthquake and sporadic fires.



Local governance systems are complex with fragmented accountabilities between various authorities. The district government and Municipal Corporation are the two main local government functionaries looking after the welfare of the communities, but the lack of single window creates huge gap between policies and practice.

The heterogeneity of the urban community often poses challenges in taking action against risks. Adopting a collective approach of 'I to we to Our' has helped counter this. Individual change agents from various walks of life were empowered to lead the formation of the Purvi Dilli Aapda Prehari (a citizen-led forum). Now established as an institution, 20 smaller linked smaller community action groups have come up that work within specific neighbourhoods. This push has bridged socio-economic and political divides to foster a sense that our risk is our collective responsibility. The groups run advocacy and awareness campaigns and improve links with district officials. Their activities also further aims of SDG Goal 11 on resilient cities!







Risk Assessments

With the support of the community, risk assessment maps were undertaken in 20 identified pockets of East Delhi district. They spatially mapped some of the existing risks and resources. This revealed specific needs, including building a community toilet specifically for women.

Empowering Youth through critical DRR skills

Training on fire fighting, first aid and light search and rescue has resulted in a skilled youth force of 220 volunteers that holds valuable skills for the community. The training has already resulted in lives of neighbours being saved! At the same time, a large number of these youth volunteers have been enrolled in the Delhi Civil Defense Force.

Being Citizen App

One shared platform strengthens citizen-government linkages and community synergy. BeingCitizen is a local social media network which provides a platform for the citizens to interact with their local and national change-makers and in process become a change-maker themselves! It allows crowd sourcing of issues such as solid waste, public health and safety through GIS linked instances. Uploading by verified volunteers ensures credibility and flagged instances make it easier for officials to respond to locally-relevant issues in a timely manner. Volunteers can also network with fellow community members through micro blogs.

Making 12 EDMC Schools Safer

Children are often the fulcrum for larger changes in the community. School safety initiatives are tailor-made for each location. From participatory risk assessments to disaster management planning to mock drills, the programmes have helped schools prepare for unforeseen incidents. At the same time, they look at broader problems children face in their neighbourhood particularly around protection issues. Such discussion and awareness building makes the journey to and from school safer, and empowers children to have a voice on their own risks!

Addressing daily stresses

Under the Swachh Bharat Mission the flagship programme of Government of India, PDAP carried out several cleanliness drives in the localities of East Delhi involving local residents. Surveys and campaigns were conducted to bring out the importance of toilets at home and to curb open defecation. Joint Action Plans and Events are organized at the local level to promote actions towards reducing stresses and risks.



When local day-to-day 'shocks and stresses' are addressed, this can potentially avoid major future disasters. In urban contexts, health is one of the most critical aspects. Vector borne diseases in particular were common, often linked to civic problems such as dirty open drains, water logging, air pollution, waste management and sanitation. Mental stress due to social issues was also high. A broad range of behavioural campaigns and advocacy initiatives have shifted the needle on this. From wall paintings to WASH trainings, from awareness drives to installation of garbage cans, neighbourhoods are slowly becoming cleaner!







The WASH committee team members visit the houses and observe the practices followed. This method HAS helped to reinforce the good practices for safe surrounding and behavioral change in the Ravidas camp community. As a result, more than 70 % households there have adopted safe practices around household cleanliness, water handling and use of toilet and waste dispose. Open drains around the house were also kept clean.

The power of Youth!

The programme has seen the empowering action taking root in various ways.

A group of girls who formed a nukkad natak (street theatre) has prepared skits on social issues such as eve-teasing and abuse. With little resources, the girls have been able to write their own scripts and perform in front of their community and government platforms as well. They have named their group Dhakkad Choriyan translating to Tough Girls and become a source of inspiration for girls in their locality. This has tremendously increased the self-confidence of the girls many of whom had dropped out of school.



ASIAN MINISTERIAL CONFERENCE ON DISASTER RISK REDUCTION- 2016

The Asian Ministerial Conference on Disaster Risk Reduction is a bi-annual event. The 2016 AMCDRR was hosted by the Indian Government and held in New Delhi from 2nd to 5th November 2016. This was of particular importance coming on the heels of the new Sendai Framework for Disaster Risk Reduction which was adopted in March last year. The conference put together an Asian Regional Implementation Plan on taking the framework forward.

SEEDS took on a leading advocacy role for civil society, pushing the case for 'localisation' and locally-led initiatives; hosting architecture-based curtain raiser events; and launching the Asian Local Leaders Forum for Disaster Resilience a unique concept championing the power of local leadership.



BACK TO BUILDING BETTER: AMCDRR 2016 CURTAIN RAISER

The field of architecture has a key role to play in the resilience process, and building back in ways that support everyday living are key.

On October 22nd, 2016, SEEDS held the first national curtain raiser for the Asian Ministerial Conference on Disaster Risk Reduction at the School of Planning and Architecture, New Delhi. The Building Back Better workshop brought together eminent architects, disaster management practitioners, media and students of architecture and planning.





The event combined talks, an exhibition and a hands-on workshop on building back in a post-disaster scenario. Focused on traditions and people-centred buildings, the series of talks looked at different angles to the question, how do we get back to building better?

The exhibits on showcased vast experience of people-centred building back better. Also on display was SEEDS universal shelter model for emergencies that evolves incrementally towards permanence. The design uses a modular frame and colour-coded pipes to build a sturdy A-frame structure. Light weight, the shelter is rapidly deployable and scalable. Skins are customisable to local contexts, ensuring sustainability and cultural compatibility. The same frame can be adapted from emergency to transitional to permanent, avoiding waste. So an emergency shelter easily assembled in 30 minutes can grow into a home!

In the hands-on workshop, SPA students were transported to a post-disaster scenario in Uttarakhand, in the immediate aftermath of a devastating earthquake. Armed with a modular A-frame structure, tarpaulin and local materials of bamboo and bamboo matting, they had to create specific housing, hospital and temporary learning structures.

Over 120 people attended the event with students from 8 academic institutions and representatives from 15 varied organisations.





The six key recommendations on building back better that emerged out of the workshop were propagated to the Ministerial Conference, finding resonance in the deliberations on the Asian Regional Plan.



LAUNCH OF ASIAN LOCAL LEADERS FORUM FOR DISASTER RESILIENCE (ALL4DR)

With the world at a tipping point, it is imperative to find ways to turn the good intentions of the global frameworks into transformative action at the frontlines. Local leadership has always been critical to successful risk reduction. As the nature of disaster risks rapidly evolves, it is clear that vibrant local champions will be a foundation for success. The Asian Local Leaders Forum for Disaster Resilience hence attempted to look at ways to empower local leadership. The aim is to recognise, link and enhance local champions including Province Chiefs or Mayors of cities, leaders from SMEs, NGOs and citizen volunteers particularly youth and women leaders.

The forum was launched on November 2, 2016 in New Delhi as a part of the AMCDRR pre-conference events. Launched in partnership with the Asian Disaster Reduction and Response Network (ADRRN) and UNISDR, and attended by dignitaries from across the region, the first forum recognised three local champions from India, Nepal and the Philippines.

The forum was also formally included in the Asian Regional Plan for implementation of the Sendai Framework, 2015-30.







SENDAI SPRING

Based on the extensive consultations that took place through the Sendai Spring campaign last year, it was clear that stakeholders at the sub-national level do not have the time or resources to study so many different frameworks. Yet, the knowledge that has gone into them can be useful to align local action with global strategy. The question was how do these frameworks become useful on the ground?

A resilience guide for use by local leaders and other sub-national stakeholders therefore began being developed. The guide brings together all five global frameworks Sustainable Development Goals, Sendai Framework on DRR, Paris Agreement on Climate Change, New Urban Agenda and the Agenda for Humanity. Combined, the frameworks are seen through a resilience lens of six main themes and 21 core areas. These directly align to work being done on the ground. It can help in planning, in sorting out challenges, in doing mid-term course correction and in assessing the impact of work. It is structured in a way that can be useful to local NGOs, private sector organisation and government officials across the world.

In order to test its practical applicability, the lens was applied to a multi-year project of CASA around climate-smart disaster risk management in Bihar, India that was nearing its end. The resulting analysis provided interesting insights into impact areas and on their contributions to the global frameworks!

The resilience lens concept was also showcased at global conferences and specially organised events in Nepal. A brainstorming session brought together regional civil society organisations in Kathmandu; and a mini-launch and training event was held with municipal officials of Bhimeshwor town close to the epicentre of the 2015 Gorkha earthquake in Nepal.

Across stakeholders, the concept was seen to hold value and is being refined further.

SMALL ACTS, BIG IMPACTS

How can we understand the impact that we are having on the environment? The Small Acts Big Impact campaign promotes awareness and builds capacities of various stakeholders on issues related to climate change.

This year, in collaboration with OAK Foundation, we worked in twelve New Delhi Municipal Council (NDMC) schools to reduce the carbon footprint and develop a model for calculating carbon foot print based on the functions of the school.

Baseline surveys were conducted on six carbon intensive areas (energy, water, waste, transportation, building and food) with the help of school principals, eco club incharges, science teachers and students. Various departments of NDMC authorities provided absolute support in terms of documentation and details required for survey. Carbon footprints and per capita carbon emission of each school were then calculated with the help of global tools and emission factors by Ministry of New and Renewable Energy, UNDP, Ministry of Environment, Forest and Climate Change.

Based on the per capita carbon emission calculation for every school, analysis reports were prepared in the form of Priority Cards of each school; and an action plan inclusive of proposed interventions in majorly in four areas Energy, Waste, Water and Transportation.

This intervention now requires to be disseminated more broadly at the school level. School authorities and eco club in-charges have shown keen interest to integrate proposed solutions as part of their club activities. These activities have a gradation system which gets calculated in their final results. The programme has helped sensitise school children on different issues related to climate change impacts and solutions which can be done without any cost.

Another key outcome of the activities carried out was the development of school based rapid screening forms which was tested in 12 NDMC schools. No such tool was available for Indian schools so far. It's a first step towards carbon neutral schools!

BATA SHOES DISTRIBUTION PROGRAMME

As part of the CSR funding from Bata Foundation, a total of 2897 pairs of shoes were distributed in 10 schools of East Delhi.

RESEARCH WORK ON NUTRITIONAL AND WATER PURIFICATION BASED ON DROUGHT IN MAHARASHTRA

This research looked at the two critical issues during drought namely nutrition and safer drinking water. This was based on SEEDS experience of working with drought affected communities in Beed district in state of Maharashtra. The main objective was to see how some of the solutions proposed by Japanese companies as part of their social initiatives can be useful for countries like India during the time of crisis.

As part of safe drinking water we developed different questionnaires for different stakeholders namely household level, local administration and hospital staff to know about the current status. Water tests were done to look at various factors like PH, turbidity and TDS to compare it with WHO proposed standards for safe drinking water. This research also looks in to current system of purifications at various levels from house hold to district government level.

As part of nutritional work, the research looked at the state of nutrition at country level and also detailed state level issues. Part of this was evaluating FAST AID, an innovative packaging proposed by Japanese chemical company and what kind of nutrition this could be useful for in terms of providing emergency relief to affected communities.

One of the key outcome of this research work was a starting point to link innovative technologies to help assist emergency situations, maximizing resources and reducing logistics challenges.

OUR PARTNERS

The various activities carried out by us are made possible through the support of individuals and organisations. We gratefully acknowledge the financial, material, moral and technical support of the following partners.

Alliance for Adaptation and Disaster Risk Reduction (AADRR)

Asian Disaster Reduction and Response Network (ADRRN)

Asian Paints
Bata Foundation

BitGiving Caritas

Charities Aid Foundation (CAF)

Chaudhary Foundation, Nepal

Christian Aid

CSIR-IMMT Bhubaneshwar

Delhi Urban Shelter

Improvement Board (DUSIB)

Earth Media

Embassy of India, Nepal

Fedex

Global Network of Civil Society

Organisations for Disaster Reduction (GNDR)

Godrej

Government of Nepal

IBM

Logitech

Madras School of Social Work

Ministry of Home Affairs, Government of India

Ministry of Women and Child Development, Government of

India

National Disaster Management

Authority (NDMA)

Oak Foundation

Owner Driven Reconstruction Collaborative (ODRC)

PLAN India

Pricewaterhouse Coopers India (PwC)

School of Planning and Architecture (SPA)

SEEDS Asia Sphere India

Tata Relief Committee

Trafigura Unicef

United Way of India (UWI)

United Way of Mumbai (UWM)

UNISDR

Wetlands International

Friends of SEEDS and individual donors

ADMINISTRATIVE EXPENDITURE | BALANCE SHEET

SUSTAINABLE ENVIRONMENT AND ECOLOGICAL DEVELOPMENT SOCIETY (Registered under the Societies Registration Act. 1860, Delhi)

BALANCE SHEET AS AT MARCH 31, 2017

In I	Rup	e	es
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		In Ru		
Particulars	Schedule	As at March 31,		
SOURCES OF FUNDS		2017	201	
SOURCES OF FUNDS				
Funds				
Corpus Fund	1.1	4,277,320	3,987,624	
General Fund	1.2	5,385,092	13,559,151	
Specific Funds	1.3	93,108,403	16,966,677	
Assets fund	1.4	1,471,959	1,794,892	
TOTAL		104,242,774	36,308,344	
APPLICATION OF FUNDS				
Fixed Assets		1.00		
Gross Block	2	6,178,854	6,691,459	
Less : Depreciation		4,706,896	4,896,567	
Net Block		1,471,958	1,794,892	
Investments	3	2,640,345	5,302,801	
		2/010/010	0,000,000	
Current Assets, Loans & Advances				
Cash and Bank Balances	- 4	100,748,550	29,878,897	
Other Current Assets	5	1,415,766	1,524,399	
		102,164,316	31,403,296	
Less: Current Liabilities & Provisions	6			
Expenses Payable	7.6.4	121,517	151,606	
Other Liabilities		1,912,328	2,041,040	
Net Current Assets		100,130,471	29,210,651	
2222				
TOTAL		104,242,774	36,308,344	

Significant Accounting Policies and

Note: The Schedules referred to above form an integral part of the Balance Sheet

Manu Gupta

Vice President

In terms of our report attached.

For Rakesh B. Lal & Co. Chartered Accountants Firm Regn. No.: 001884N

According Behari Lal Propreitor

Gurugram

Membership No.: 082412

Place: New Delhi Date: 25th October 2017

FOR SUSTAINABLE ENVIRONMENT AND ECOLOGICAL DEVELOPMENT SOCIETY

Anshu Sharmans * A13 Secretary

SEEDS

SUSTAINABLE ENVIRONMENT AND ECOLOGICAL DEVELOPMENT SOCIETY (Registered under the Societies Registration Act. 1860, Delhi)

INCOME AND EXPENDITURE ACCOUNT FOR THE YEAR ENDED MARCH 31, 2017

	1		In Rupees
Particulars	Schedule	For the year ended March 31,	
		2016-17	2015-16
A. INCOME			
Grants & Donations	7	135,612,792	100,222,730
Interest & other Income	8	1,448,250	1,712,616
		137,061,042	101,935,346
B.EXPENDITURE			
Details of Expenditure	9	55,006,130	85,756,646
		55,006,130	85,756,646
Excess of Income over Incom	e	82,054,912	16,178,700
Significant Accounting Policie	s and I 10		

In terms of our report attached.

For Rakesh B. Lal & Co. Chartered Accountants Firm Regn. No.: 001884N

Gurugram

Rajat Behari Lal Propreitor

Membership No.: 082412

Place: New Delhi

Date: 25th October 2017

For SUSTAINABLE ENVIRONMENT AND ECOLOGICAL DEVELOPMENT

SEEDS NEW DELHI

SOCIETY

Manu Gupta Vice President Anshu Sharma Secretary



15-A Institutional Area, R.K.Puram, Sector-IV, New Delhi-110022, India Tel. : (91-11) 26174272 | info@seedsindia.org | www.seedsindia.org





