

# Annual Report 2017



Development Alternatives

## ORGANISATION AT A GLANCE

<b>Society Registration</b>	:	Society Act XXI of 1860; Registration No. 12964
<b>FCRA</b>	:	Section 6 (1) (a) of the Foreign Contribution (Regulation) Act 1976 (FCRA Reg. No. 231650202)
<b>Vision</b>	:	A world where every citizen can live a secure, healthy and fulfilling life; in harmony with nature
<b>Mission</b>	:	To create models that generate sustainable livelihoods in large numbers
<b>Approach</b>	:	Innovation, incubation, implementation and influence to create large scale impact

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### Development Alternatives

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## *Message from the Chairman*



India is making progress and so is the agenda of sustainable development. With each passing year, the concern is also growing over the future that India faces. With a population of about 1.2 billion and expecting to grow by another 300 million in the coming decades, India surely needs to set its priorities right! Its cities are mushrooming, as each year people from rural areas migrate to cities seeking jobs and better prospects. Will the urban infrastructure be able to support them? Will our farms have enough workers and productivity to feed the nation?

Sustainable development is a global concern, which everybody agrees on, but bringing this global concern into public policies and action is a difficult task. The present economic growth helps to create more opportunities for the more educated sections of the upper and middle class, but does it 'trickle-down' to the poorer sections of the society.

To achieve a sustainable future, the world clearly has two priorities that must come before all others. The first is to ensure that all citizens have access to the means for satisfying their basic needs. The second is to evolve practices that bring the environmental resource base, on which their lives and future integrally depend, back to its full health and potential productivity.

Globalisation, in the sense of international economic integration, has brought with it many goods as well as bads of its own. Growing trade, transfer of technology, movement of skilled professionals and the exchange of knowledge have all contributed to improving the lives of people in many countries. At the same time, rising inequity, lopsided accumulation of wealth and the concentration of economic and political power that comes with it, have now started to limit the integration that will be tolerated either by the poor or the rich.

Mechanisation and digitalisation, including robotics, artificial intelligence and other forms of automatisation, while delivering great improvements in lives and opportunities, are now threatening jobs, making it necessary to worry about the future of work and accelerating the need for alternative sources of meaning for the individual and wealth creation for society.

Despite received wisdom, we continue to think of implementing end-of-pipe solutions, rather than mitigating causal factors.

Systems thinking provides policy makers the framework and toolkit to understand seemingly disconnected effects of actions, and why, for example, solutions in the short term (such as emphasising cash crops) in later years exacerbate the very problems (such as farmers' financial security) they were designed to solve. We urgently need to strengthen our nation's ability to build the skills and capacities of our policy makers, planners and programme implementation personnel.

Development Alternatives has spent three decades in creating sustainable livelihoods and working to influence government policies and corporate behaviours in this direction. This year's Annual Report presents examples of activities spanning the six programmatic areas in which Development Alternatives works. The new paradigm that is based on 'Systems Thinking for Sustainable Development' compels users to seek direct-indirect, spatial, temporal and sectoral linkages in policy strategies and solutions. It widens perspectives and induces decision makers to look critically at the indicators of development, beyond the traditional economic and growth measures of GDP. These are the areas that the Development Alternatives Group seeks to explore and implement.



**Dr. Ashok Khosla**  
Chairman





# Impact

eco-solutions  
for people and  
the planet

## Clean & Green Environment



Managing natural resources sustainably;  
ensuring resilience and food security



Innovating green and clean technologies  
for communities and businesses

## Income Generation Opportunities



Supporting entrepreneurs; enhancing and  
greening local economies



Building skills for green jobs; enabling  
future ready youth

## Empowered Communities



Delivering basic needs solutions and  
services for all



Strengthening people's institutions and policies;  
fostering green, inclusive, resilient development

# Empowered Communities

**Basic Needs Fulfilment**  
Habitat  
WASH  
Energy  
Literacy

## Employment Generation

Skill development  
Trainings – Entrepreneurship,  
Employability,  
Executive Green jobs

# Income Generation Opportunities

**Enterprise Development**  
Business models  
Micro-enterprises  
Value chain development

**Strengthening Institutions**  
Governance systems & Planning processes  
Community institutions  
Policy influence

**1.436** million  
people reached

**89,332** tonnes of  
Carbon saved

**232** million litres  
of water conserved

USD **7.03** million  
in local economy

USD **7.15** million  
transacted

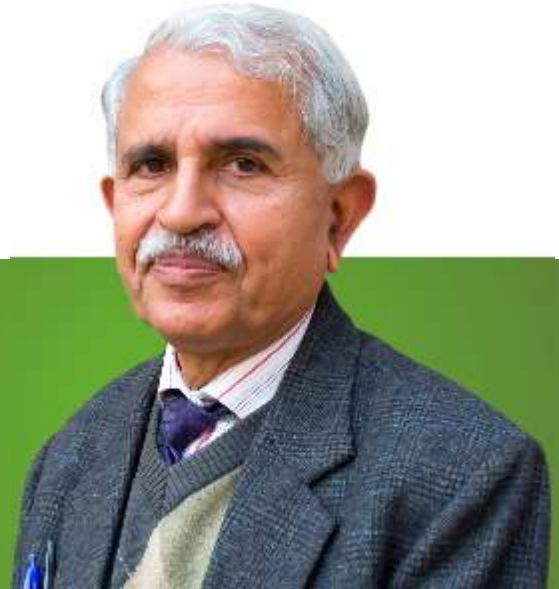
## Clean Technology

Renewable energy  
Eco-construction  
Waste to wealth technology  
Resource efficient technology

**Natural Resource Management**  
Water management  
Sustainable agriculture  
CCA Planning

# Clean & Green Environment

## *From the President's Desk*



**T**he world is changing rapidly and so are its resources. The UN and the member states have already raised an alarm and called for an urgent action through the climate accord, SDG framework and CBD commitments to address the immediate and persistent concerns. The year 2016 witnessed the Global Agenda for Sustainable Development, moving into the year of implementation, as several countries set their course of implementing the Sustainable Development Goals (SDGs). Working in the spirit of “leaving no one behind”, SDGs are a unique opportunity to place the world on a more prosperous and sustainable development path.

A majority of the Earth's population now lives in urban areas, which is expected to grow by a further 2.5 billion people by 2050. This growth will exaggerate inequalities resulting in three-fourths of the world's people living in less-developed countries and one fifth

below the poverty line. Industrialisation, globalisation, exploitation and environmental damage make the problem more complex and choices more difficult. In this web of complexities, the transition to green and inclusive economies is being deliberated both at national and global level. So, in this era of reflections, promises and commitments to sustainable development, the concept of Green Economy is exciting, and interlinks economic growth with human development and environment sustainability.

India, being one of the fastest-growing big emerging market economies in the world, is also responsible for meeting the burgeoning needs of its billion-plus population, within its environmental constraints and boundaries.

Development Alternatives (DA) is engaged in demonstrating this concept through evidence based research in multiple sectors of potential Green



Economy. The practice to policy approach is supported with advocacy, making this a core part of the scaling up and mainstreaming strategy.

This year, as a response to climate change initiatives, two national consultations were organised in Sikkim and Kerala for formulating their respective State Action Plans on Climate Change (SAPCC). We, at Development Alternatives have a commitment towards scaling up of clean technology initiatives. Collaborating with the State Government of Bihar, Development Alternatives with support from the Bihar State Pollution Control Board (BSPCB) has helped in establishing more than 125 production units that manufacture fly ash based bricks. This endeavour is the first step towards phasing out of resource consuming, environmentally damaging brick kilns.

With DA's initiatives, the Ahmedabad Municipal Corporation has notified a preferential procurement policy for C&D waste based products from local entrepreneurs, thereby encouraging use of the cities construction and demolition waste in new construction.

In the area of sustainable rural housing, DA developed a portfolio of standard designs in association with United Nations Development Programme (UNDP) and Ministry of Rural Development (MoRD), which were

adopted by UP State Housing Policy under Pradhan Mantri Awas Yojana.

In this year's work of Policy Alliances, partnerships were developed for achieving Sustainable Development Goals, accelerating Sustainable Habitat and managing Climate Change and Resource Efficiency at global, national and sub-national levels.

This has involved a series of public discussions with thinkers, political analysts, entrepreneurs, academia and students for developing ideas for India's transition to a more sustainable future. In this financial year, five dialogues were held in which experts from diverse background participated. **Dialogue 2017** is a series of discussions focused at building consensus on directions and measures India must take to accelerate a transition towards a truly sustainable future. The DA Group, in its flagship event TARAGram Yatra 2016, focused on the critical need of localising SDGs, the imperative of connecting policy with practice, and the policy shifts required for implementing Global Agenda 2030 in our country's endeavour for achieving economic growth and prosperity.



**Dr. Arun Kumar**  
President



# Natural Resource Management

- 6000+ farmers report income enhancement by 20%.
- Over 1.18 billion litres of water saved.
- 12,180 tonnes of top soil saved from erosion.



*Managing natural resources sustainably;  
ensuring resilience and food security*

## Priority Areas

Demonstrate models for land and water management, water use efficiency and resilient agriculture models and forest restoration in Bundelkhand. Share knowledge and build capacities of partners and networks to replicate good practices in Natural Resource Management for drought prone regions.

## Practice

### **Efficient Land and Water Management**

This year, the primary focus of this programme has been on superimposing interventions on water resource development with climate resilient agriculture. In areas with existing watershed infrastructure, the emphasis was on promoting agricultural practices that utilise water more efficiently. The capacities of Village Development Committees and Watershed Committees were enhanced for participatory and sustainable management of watershed infrastructure. For effective land and water management, 586 soil conservation structures, over 25,000 running metres of farm bunds and 80 water conservation structures were constructed.

### **Climate Resilient Agriculture Practices**

A total of 3,450 farmers were trained as 'change agents' on a range of improved practices and techniques to facilitate the widespread adoption of climate resilient and diversified agriculture models amongst the farming community. About 350 farmers adopted improved farming practices, as a result of which enhanced income of INR 5.23 million was realised by these farmers in the year.

### **Farmers' Institutional Development**

The Farmer Producer Organisations (FPOs) formed, were trained to engage profitably with the market by aggregating their farm produce for better realisation of prices and farm inputs.

### **Prem Narayan: A Farmer with Hope**

Prem Narayan, a resident of Manpura village in Shivpuri district of Madhya Pradesh lives with his wife and a 14 year old son. With 1.5 acres land and managing a single crop, life was not easy for Narayan and his family. Poor productivity of the land further aggravated the struggle for daily survival. With traditional agricultural techniques, he could not yield good results. He was introduced to vegetable farming. Initially, with some inhibitions he cultivated cabbage, tomato, chilli, lady finger and brinjal only on one part of his land. Gradually, things changed as he started yielding good produce and better income. He was soon motivated to invest more in vegetable cultivation. As he started earning profits, his income improved. He is now a leader in his village and has rekindled the faith in land amongst his fellow farmers.





## Product

### Farm Diversification Models for Small Farms

In Shivpuri a 150 small farmers initiated farm diversification models in their fields in Bundelkhand. A diverse range of models, including agro-horti, agro-forestry, horti-pasture and vegetable cultivation based models, were demonstrated. Using the evidence of economic and resource efficiency benefits from these models, they are in parallel being promoted for wider adoption amongst the farming community. These are extremely relevant in the Bundelkhand context, where over 80% of the agricultural community is of small farmers, characterised by an average landholding of about 2.5 acres with significant resource limitations and investment constraints.

### Production of Good Quality Seeds

Production of improved seeds using certified breeder seeds has been piloted by members of one of the Farmer Producer Organisations. These seeds will be sold to local farmers in the next season. This pilot is expected to eventually emerge as a new avenue for farmers' local access to good quality and reliable seeds at affordable prices.

### Tools for Documentation and Impact Analysis

Combined with GIS technology, Decision Support System tools were developed for the identification and monitoring of watershed interventions that include social and economic benefits, besides the environmental impacts.



## Policy

The Natural Resource Management Programme conducts participatory research and policy consultations with experts, practitioners and policy actors on a range of issues linked to climate change adaptation and resilience. Concerns of disaster risk resilience, food security, climate finance and SDGs are discussed at the level of community action, as well as state and district planning.

A narrative study documented people's understanding, perspectives and experiences on climate change. The study was based on group consultations with the farming community and Civil Society Organisations (CSOs) in Bundelkhand.

Two knowledge sharing workshops were organised with the Bundelkhand Knowledge Platform - a network of 40 CSOs in Bundelkhand - to exchange information on impactful pilot initiatives. The workshops connected the practitioners to new research and appropriate technologies being developed by local research institutions regarding watershed management and sustainable agriculture practices.

Two national consultations were organised in Sikkim and Kerala on their respective State Action Plans on Climate Change (SAPCC). Government and civil society representations from India and Pakistan met in New Delhi at the Indo-Pak Track II dialogue on climate change. The discussions identified areas of collaborative research on decentralised energy and water management, and collaboration on issues of trans-boundary ecological import.



*... Going forward, the programme will focus on working with the Farmer Producer Organisations (FPOs) to disseminate and mainstream climate adaptive and resource efficient technologies amongst their members.*

*Partnerships with research institutions will be strengthened for identification of appropriate technologies and practices for rainfed-dry land contexts, and also rigorous academic assessment of their impacts.*

*Development Alternatives will also work closely with the network CSO partners of the Bundelkhand Knowledge Platform. Through the platform, it will capture the good practices being implemented across Bundelkhand for catalysing their replication across the region.*





# Clean Technology

- Bihar State Pollution Control Board establishes cleaner brick production technologies - more than 125 units established in the state.
- Ahmedabad Municipal Corporation notifies favourable procurement policy for Construction and Demolition waste based products.



*Innovating green and clean technologies for communities and businesses.*

## Priority Areas

Construction and energy sectors are the major consumers of finite fossil fuels and mineral resources in the world. The Clean Technology programme focuses on reduction in the use of virgin raw materials and CO<sub>2</sub> emissions through product and process innovations in these sectors.

## Practice

**Eco-Kiln, Malawi (Africa):** The Eco-Kiln is an economically feasible, energy efficient and environment friendly technology to produce burnt clay bricks. The Development Alternatives Group has been providing a comprehensive package of Eco-Kiln services to prospective clients. One such Eco-Kiln has been operationalised this year in Malawi, Africa, as part of a South-South Technology Transfer Initiative. Development Alternatives has provided technical support and training to the workforce for this purpose.

**Low Energy Water Purification - Demonstration of Solar Water Disinfection (SODIS) products and Jal-TARA Arsenic filter:** SODIS is a concept which is low cost and can disinfect water, making it drinkable by using solar radiation. Product prototypes were demonstrated and validated at three geographical locations. Development Alternatives also introduced the Jal-TARA household arsenic filter to 789 households in Khagaria district of Bihar. Two water enterprises have been set up in Nalanda district of Bihar, where 346 families are being served through community plants.

**Green Power Management - Solar Microgrid:** With support from The Rockefeller Foundation's Smart Power for Rural Development (SPRD) Project, Development Alternatives has set up solar-microgrids in 22 villages across two states - UP and Bihar. Currently, these service over 1,500 consumers. An innovative mobile application for load management and customer servicing has enabled home and enterprise electricity connection management with negligible payment defaults and high customer satisfaction.

## South-South Knowledge Transfer Eco-Kilns in Malawi

Brick making in Malawi, Africa, is an unorganised small-scale activity. Bricks are fired in traditional clamp kilns using only firewood as fuel. If this method continues, Malawi will be completely deforested in 30 years. According to an estimate, a minimum of 1.7 billion units of burnt clay bricks are required annually, consuming approximately 850,000 metric tonnes of wood to produce them, in order to meet the growing urban housing demand. Development Alternatives and the Department for International Development installed an Eco-Kiln based on Vertical Shaft Brick Kiln principles. What started out as a pilot in green brick technology transfer from India to Malawi, led to the cleanest and most energy efficient burnt brick firing technology in Africa. It also created better and sustainable employment opportunities for women. The initiative has saved a total of 270 tonnes of firewood, generated business worth USD 80,000, and provided jobs for 145 people (of which 50 are women) in 2016 alone.



## Product

### **Building Materials from Foundry Slag and Construction and Demolition (C&D) Waste**

C&D waste and foundry slag waste are mostly dumped across cities in India. There are more than 500 million tonnes of C&D waste and one million tonne of foundry slag waste generated in India per annum. Development Alternatives has been working on the substitution of coarse and fine aggregates in concrete with processed C&D waste and foundry slag waste. Research with these two materials has resulted in 100% replacement of virgin raw materials, like river sand and stone, in non-structural applications such as paver blocks, kerb stones, tree guards and similar products. Initial results indicate that a high quality can be maintained in the products while reducing the cost of manufacture by a significant margin. Green certification of products additionally supports marketing of products that are developed from these secondary raw materials.

### **Low Carbon Calcined Clay Cement (LC<sup>3</sup> cement)**

Research has been undertaken at the organisation for the development of LC<sup>3</sup>. This product promises tremendous benefits for achieving higher resource efficiency while also reducing CO<sub>2</sub> emissions in the construction sector. India would be a major beneficiary of this innovation because good quality kaolinite clays are in abundance for commercial production of LC<sup>3</sup>. The LC<sup>3</sup> project has now moved on to its next phase where DA is focusing on product demonstration, especially eco-friendly pre-fabricated materials using low carbon cement. Emphasis has been laid on reaching stakeholders through various national and international research, discussion and policy platforms. Standardisation of LC<sup>3</sup> by the Bureau of Indian Standards (BIS) will be further pursued.





## Policy

The growing affordable housing sector is estimated to be potentially the largest consumer of natural mineral resources. Some of these like top soil, river sand and lime stone are becoming critical from ecological and economic perspectives. With an attempt to foster resource efficiency in the affordable housing initiative of the Government of India (the PMAY-urban), DA has been conducting national and state level consultations emphasising the ecological and economic benefits of resource efficient technologies. With support from the Heinrich Böll Foundation, these consultations have pitched the need for green, resource saving construction practices high on the agenda of affordable housing policy.

The application of resource efficient technologies was introduced in the affordable urban housing policy guidelines for five states - Telangna, Andhra Pradesh, Assam, Sikkim and West Bengal. In parallel, a project supported by the UNEP-10YFP in partnership with UN-Habitat, TERI and Oxford Brooks University is developing a toolkit to support decision making on sustainable technologies in affordable housing.

In order to operationalise resource efficiency in brick production, DA continues to engage with the State Government of Bihar and other relevant departments, such as Bihar State Pollution Control Board. As a result of the policy interventions and awareness generation activities, more than 125 fly ash brick manufacturing units have been established in the state, as compared to around five, three years ago. Further, Development Alternatives has been working with the Ahmedabad Municipal Corporation to push for preferential procurement policy for C&D waste based products from local entrepreneurs. This policy has now been notified by the Ahmedabad Municipal Corporation.



*...Going forward, the Clean Technology programme of Development Alternatives will focus on new product development using wastes such as pond ash, marble sludge, slag, marble dust etc. New construction technology applications for mountain regions in India and a technology assessment toolkit are on the anvil. This will be achieved through forging partnerships with research institutions and private/public sector companies. Development Alternatives will also extend its support to policy makers and planners for effective environmental and green technology adoption decisions. On the waste water treatment front, selection, validation and scaling up of low-cost, eco-friendly and decentralised technologies will be an area of exploration.*



# Enterprise Development

- Indian Micro Enterprises Development Foundation, a special purpose vehicle of the DA Group, empaneled as a Nodal Agency by the Ministry of MSMEs under its Scheme of Fund for Regeneration of Traditional Industries.
- Capacities of 3,552 entrepreneurs built through technical and business planning skills and information.



*Supporting entrepreneurs; enhancing and greening local economies.*

## Priority Areas

Design and incubation of services for technology access, finance access and management, and management capacities to support micro and small entrepreneurs to start and expand their businesses.



## Practice

Development Alternatives (DA) supported the development of 350+ green and inclusive enterprises and over 3000 income generation activities across various geographies in Central India. These enterprises have been provided to technology management, capacity building, and marketing support. The key sector focus of these enterprises were primarily rural services, green building materials and agriculture.

In order to continue social enterprise innovation, the Group laid emphasis on development of new products (like C&D Waste, community water arsenic filter, energy management devices) and processes (like microfranchisee and aggregation models) for delivery of basic needs and services in the communities.

A major highlight was the development of over 150 enterprises were supported under the Community Engagement, Load Acquisition, and Micro enterprise Development (CELAMeD) initiative. Designed to promote load development services to different Energy Service Companies (ESCOs) across 60 sites in Uttar Pradesh and Bihar, the project focused on developing new and existing enterprise development to create productive loads such that they would prove as fruitful loads for the ESCOs and also contribute to local economic development.

Through our efforts across various enterprise development initiatives, DA has facilitated the creation of 1000 new jobs across various areas of its operation.

DA's special purpose vehicle focused on enterprise development is empaneled as a Nodal Agency for the management of the SFURTI Scheme of Ministry of Micro, Small and Medium Enterprises, Government of India.

### Greening and Growing Local Enterprises: The Case of Jagram's Dhaba

Jagram is an ambitious businessman successfully running a small eatery, 'The Ram Misthan Dhaba', in Shivpura village of Balrampur district, Uttar Pradesh. Despite being surrounded by around 25 other similar eating joints, Ram Misthan is the preferred one, serving over 200 customers a day.

Jagram was one of the first few customers to avail TARAurja's solar lighting services, enabling him to run his business for longer hours. Encouraged by the potential of solar power, he then installed a deep freezer to sell 'chilled' soft drinks. After experiencing some success with lighting and the deep freezer, he enthusiastically took his business to the next level by installing a juicer-mixer and hiring one more worker.

Jagram is now one of the many examples who demonstrate that local solar electricity services provide reliable and green power and help grow local economies.



## Product

The **i-STED (innovation-Science and Technology based Entrepreneurship Development)** initiative, supported by the Department of Science and Technology, has the broad objective of setting up enterprises in various areas such as building materials, paper recycling and processed fuel. It is also enabling the formation of a special purpose vehicle for supporting waste to wealth enterprises. Under this project, eight enterprises were set up and 37 enterprises strengthened in 2016-17.

**The Smart Power for Rural Development (SPRD) - India, Load Development** initiative provides access to clean energy for productive application. In this year, 31 new enterprises that use green energy services have been set up and commercial loads enhanced for 360 micro-enterprises. Over 200 entrepreneurs, five Energy Service Companies, two Civil Society Organisations and one social marketing agency have benefitted from the capacity building initiatives of the programme.

**The Work 4 Progress programme**, launched in partnership with "la Caixa Banking Foundation" of Spain, aims to develop a multi-stakeholder based learning and action platform to scale up innovative enterprise development solutions for boosting job creation. The initiative is active in two geographies, in Eastern Uttar Pradesh and Bundelkhand, where intensive engagement with existing and potential new entrepreneurs, both individuals and groups, is providing valuable lessons for the nature and delivery of support needed for the creation and sustainability of enterprises.



## Policy

Small and Micro Enterprises (SMEs) are recognised as drivers for job creation and fueling inclusive economic growth.

The initiative on Mainstreaming Green and Inclusive Economies is engaging with civil society actors, entrepreneurs and public policy to build a shared narrative on the triple bottom line value of local green enterprises and support the eco-system required for their promotion. Through a series of stakeholder workshops organised this year, the programme engaged with over three thousand stakeholders, including government, businesses and civil society, on issues of prioritising greening the economy in state and national agendas, influencing finance flows and integrating the value of natural resources in local economic planning. State level consultations were conducted in Sikkim, Maharashtra and Madhya Pradesh on the role of MSMEs in greening the economy.

Technology is seen as a vital tool for bringing in process efficiencies in micro, small and medium enterprises. To understand this and explore the challenges and gaps pertaining to technology in the Small and Micro Enterprises (SMEs) ecosystem, a round table consultation was organised during the annual TARAGram Yatra. The discussion highlighted the need to create scalable solutions for employability and entrepreneurship, where the major drivers are capacity building and green technology supports.

The team continued its effort on knowledge sharing for green enterprises through policy research initiatives.



*... Going forward, the Enterprise Development programme is building new partnerships with technology providers, financial institutions and government bodies to demonstrate a robust enterprise development eco-system that can support and service large numbers of Small and Micro Enterprises creating jobs at scale. In parallel, lessons from the enterprise development processes and engagement with public programmes and corporate partnerships for the same will be shared to inform policy and scale up enterprise creation. The Development Alternatives Group hopes to innovate tools, technologies, processes, and models that will unleash entrepreneurial energies at scale to create a*





# Skills for Jobs

- 7287 individuals trained with new skills, enabling them to enter the workforce.
- 5135 women and girls coached and made aware about entrepreneurship.
- 1837 truck drivers and helpers up-skilled on road safety and WASH through Suhana Safar programme.



*Building skills for green jobs; enabling future ready youth.*

## **Priority Areas**

*Employability skills and substance knowledge for new jobs (for young women and men) and up-skilling existing workers. Job placements and introduction to self-employment opportunities.*

## Practice

Intensive work was done to enhance skills of individuals from different target groups. Capacities of over 5135 school girls and young women were built through sessions in schools and communities on employability. 1837 truck drivers and helpers were up-skilled on effective driving, road safety and WASH practices. A total of 7287 individuals were imparted livelihoods training through various programmes. New partnerships were fostered with corporates, multi-laterals and bi-laterals like Fullerton India, Maersk Group, UNDP and HDBFS, supporting the skill development space.

A Pilot Centre of Excellence (CoE) for Skilling Girls & Women was initiated in Delhi. Development Alternatives partnered with UNDP and IKEA to bridge information gap for 5000 women and provide skill development training to 1200 women and girls in the Delhi-NCR region.

While a lot of the Development Alternatives Group's work focuses on rural locations, urban unemployed youth and girls were also targeted this year. Residential and non-residential training centre formats were established and a unique concept of 'Community Training Centre' was launched in order to reach out to unemployed women in the urban villages through skill building.

## Skill Development to Self-Reliance: The Case of Ripu

Ripu, a young girl of 23 years, full of enthusiasm, dreamt of getting a good job to contribute to her family's income. At a young age, she faced a lot of hardships; her father moved out of the family and her mother was the sole bread winner. However, this did not deter Ripu's mother from educating her children. Once Ripu completed her graduation from an open school, she enrolled for the Retail Trainee Associate course at Development Alternatives Group's Centre of Excellence in Delhi. She was placed with the retail chain, Pantaloons and later with an entity of DLF Group. With an income of Rs. 15,000, she has started contributing to the construction of her new home and believes in channelising 80% of her monthly salary to her family. She dreams to become a Manager one day, and also encourages other girls in her locality to connect with skill training and its benefits.





## Product

Information, Education and Communication (IEC) materials are effective means of disseminating relevant information to the target population. A set of tools and knowledge products were developed to bring about a behavioural change through an effective interactive process. These include:

- Infotainment pen drives, plugs and play media modules were developed for imparting knowledge on opportunities in the livelihoods space for girls; and for enhancing knowledge of truck drivers and helpers on road safety, personal hygiene, alcoholism etc., for work efficiency.
- Several training modules were developed for conducting interventions and programmes for retail trainee associates, assistant beauty therapists, financial literacy, road safety, waste management, personal hygiene, importance of continued education and prevention from seasonal diseases.
- Knowledge products on WASH were produced under the Swachh Bharat Abhiyan, and the same were uploaded on the website of Ministry of Drinking Water and Sanitation.
- A renewable energy toolkit was prepared for replication of lessons in the energy space, for skill enhancement of existing community members to create sustainable livelihoods.



## Policy

This year, a consultation on 'Drivers for Employment and Entrepreneurship' was organised in Delhi, in association with United Nations Development Programme (UNDP). The overall objective of the discussion was to form a 'policy to practice connect' that create scalable solutions for employability and entrepreneurship, with major drivers being capacity building and technology. A senior level representative from National Skill Development Corporation (NSDC) participated in this consultation and shared policy imperatives to further propel the skill development agenda.

The Skills for Jobs programme is associated with the Ministry of Rural Development's mission to build skills of rural artisans as an integral part of the Prime Minister's Awas Yojana (rural). Training modules developed by the group for assistant mason curriculum have been incorporated in the Construction Skills Development Corporation model syllabus.



*... Going forward, the Development Alternatives Group plans to widen and strengthen its outreach and action to propel employment through training and capacity building of rural and urban youth, women, farmers and artisans in India. While individual training has been a successful and effective model for us, in the next three years, the Development Alternatives Group is committed to innovate and incubate other effective models for employment, such as web based programmes, mobile application based employment coaching, etc.*



# Basic Needs Fulfillment

- Sustainable Rural Housing Designs developed in association with UNDP and MoRD, adopted by the state of Uttar Pradesh under Pradhan Mantri Awas Yojana - rural.
- More than 2,00,000 women made functionally literate.



*Delivering basic needs solutions and services for all.*

## Priority Areas

Design and incubation of products, services and delivery models for eco-housing, safe drinking water and sanitation, clean domestic energy and functional literacy for adult women.



## Practice

The DA Group enabled over 250,000 people across UP, MP and Rajasthan to access safe water, shelter, clean energy solutions and basic literacy services.

The literacy and learning programme, TARA Akshar<sup>+</sup> (TA<sup>+</sup>), continues to make women literate across the states of UP, MP and Rajasthan. A 17-day video based programme, comprising of modules on financial literacy was introduced. A total of 18,710 women were enabled to read, write and do simple basic maths and graduated from TA<sup>+</sup> programme in this year.

The WASH programme's efforts resulted in access to safe drinking water for 93,000 people. Through social marketing and awareness programmes, 1,47,000 people were introduced to good WASH practices. WASH in schools expanded to an additional 63 schools, resulting in 7000+ students being sensitised to climate resilient WASH practices.

Interventions to build capacities of rural masons for providing green construction services to communities continued in the year. The curriculum prepared for 'Assistant Mason' in the 'Construction sector' received accreditation from National Skill Development Council (NSDC). Two green building enterprises were set up to cater to the need of building materials for households of Niwari of Tikamgarh district and Ishanagar of Chattarpur district, Madhya Pradesh.

Clean domestic lighting solutions have been provided to 309 households by linking community institutions like Urja Samitis with the technology promotion agency (TARAurja). Solar pico-grids were installed in 10 villages in the Pahuj cluster of Babina block in Bundelkhand. Over 9,520 individuals and one school benefitted directly from this intervention.

### A Village Manages its Drinking Water Service: The case of Punawli Kalan

About two decades ago, the people of Punawli Kalan, a village in Jhansi district in the drought-prone Bundelkhand region of Central India, began to experience the impacts of the changing climate. The village population depended on 22 hand pumps and open wells for drinking water, most of which had gone defunct. Meanwhile, women SHGs from 25 villages who had formed a federation, the 'Sahyogini Mahila Mandal', decided to take the matter in its hands and solving the village water woes. The pipe infrastructure was restored, a water tank of 65,000 litres storage capacity was constructed and a solar pump was installed. Today, 2,000 people of the village are serviced by the Women's Federation, fulfilling their daily drinking water requirements. The federation has collected a fund of INR 110,000 as water use charges, which is used in the maintenance of the infrastructure. Periodic water quality testing and disinfection of the main source is undertaken by the federation to ensure continued availability of safe drinking water to all in the village.



## Product

In the year 2016-17, Development Alternatives worked towards the provision of clean drinking water through improved technology and delivery systems. Aqua<sup>+</sup>, a hypochlorate solution, popularly known as "*do boond ka jaadu*", has been developed as a safe and affordable water purifier. A 'micro franchise' model for creating alternate channels for distribution of Aqua<sup>+</sup> was tested. Nearly 15,000 people were able to access safe drinking water this year. Additionally, various social marketing as well as monitoring and evaluation toolkits were developed as part of the initiative.

CSIR-NEERI developed five SODIS products and devices by using its patented materials for water disinfection. SODIS (Solar Disinfection) is a concept which is low cost and can disinfect water, making it potable by using solar radiation. Development Alternatives has demonstrated and validated these product prototypes at three geographical locations - Delhi, Punawli Kalan village of Bundelkhand and Udaipur district of Rajasthan. Household products such as SODIS Jars and SODIS Pouches have been validated in 50 households, and solar cookers in 5 households of Delhi. Community level products such as solar pasteuriser and Compound Parabolic Collector (CPC) reactor have been validated at Punawli Kalan and Udaipur, respectively. Validation for these products has been conducted based on four major indicators, i.e. social acceptance, technical feasibility, environmental friendliness and economical affordability with favourable results.





## Policy

In 2016-17, 1,025 households were provided sustainable housing solutions. The major highlight of the year has been sustainable rural housing designs developed by DA in association with United Nations Development Programme (UNDP) and Ministry of Rural Development (MoRD) that were adopted by UP State Housing Policy under Pradhan Mantri Awas Yojana (Gramin).

Six region-specific designs with the recommendation for appropriate and affordable technologies have been developed based on local materials and traditional construction practices, which are less costly and more environmentally friendly than brick, cement, and steel-intensive systems.

The designs were developed after a detailed survey of the lifestyles and space requirements of the beneficiaries. While people feel more comfortable with the type of houses they have been living in, at the same time they aspire for better quality requiring minimum maintenance, safety against natural disasters and a possibility to improve as and when they have some funds available to invest on their house. The designs and specifications were reviewed based on published literature on some of the recommended construction systems and experience of the reviewers.

Continuous support to the Prime Minister's Awas Yojana (rural) was provided in the form of technical inputs to the rural mason training modules. The National Skill Development Corporation (NSDC) has identified DA as one of the training institutes to provide training for masons.



*... Going forward, the programme is focusing on an ecosystem of sustainable delivery models of technical solutions, services and finance to make solutions for housing, safe water, green energy and functional literacy available and affordable to rural communities. Behaviour change communication interventions would be woven into the interventions for ensuring that communities are enabled to access the locally supplied basic needs services.*



# Strengthening Institutions

- INR 9.6 crores of social capital mobilised through community institutions.
- 10,000+ households (HHs) received services through apex institutions.
- DA appointed as a Resource Support Organisation (RSO) for CSOs in Bundelkhand region, Central India, by NABARD.



*Strengthening people's institutions and public policy; fostering green, inclusive and resilient development.*

## Priority Areas

The programme works to replicate good practice and advocate for enabling policy environment through strengthening community based organisations and apex institutions of community collectives, business networks and policy alliances with civil society. It focusses on building bridges from practice to policy, developing tools and methods for better planning and building capacities of policy makers, planners and practitioners.

## Practice

In the year 2016-17, Development Alternatives made efforts to strengthen community level institutions through new partnerships with civil society organisations and local government institutions. This resulted in increased community participation in local governance across 22 villages; over 500 new women's Self Help Groups formed and mobilisation of local share capital in the Bundelkhand region of Central India. This year, INR 96 million was mobilised through community institutions. Further, community apex institutions delivered services for safe water, electricity and seeds to over 10,000 households. Dairy and Agri business clusters also emerged through seven Farmer Producer Organisations (FPOs). In this process, new tools to support community institutions were developed, namely, a training manual for women Self Help Groups / Civil Society Organisations; a training manual on adaptive climate change for Panchayati Raj Institutions; operational manuals for Community Resource Persons; and community mobilisation toolkits and business plans for local micro enterprises.

This year, new business networks were tapped and civil society partnerships forged to up-scale our interventions across new geographies. Investment worth INR 130 million was leveraged from private/public partnerships for development initiatives. Our geographical presence increased across 40 districts in eight states.

## Achieving the SDGs through Legislation in Sikkim

Sikkim, despite being a very small state, is a pioneer in India in its attempt to create a legislation (currently named the Sikkim Wellbeing of Generations Bill 2017) guided by the SDGs framework. The bill aims to integrate the SDGs within departmental plans and strategies. DA has been the primary knowledge partner, supporting the state in research, assessments and capacity building initiatives. Through a series of stakeholder consultations with youth groups, farmers, industries, Micro, Small & Medium Enterprises, civil society, government officers etc, a vision for the sustainable future for Sikkim and an institutional framework to achieve it were developed. In order to understand its practical ramifications, a well-being strategy for Sikkim's Urban Development and Housing Department was developed. This is a model for other state departments to design their functional plan, strategy and vision. The document focused on the issues of waste management, holistically analysing the system and proposing potential interventions for improvement at the technical, financial, institutional and policy levels.





## Product

A number of policy papers and planning support tools were developed this year.

The State of Environment (SoE) Report for Sikkim, completed this year, aimed at bringing forth the key environmental concerns of the state. The process also reviewed existing policies, plans & programmes and suggested relevant policy strategies.

The State of Environment Report (India), depicted the environmental issues at the national level. The framework highlighted the cause-impact relationship for each environmental issue, with special focus on climate change, water resilience and pollution issues.

A collaborative perspective paper mapping the connectedness of climate and SDGs agenda was written in partnership with the Climate Action Network South Asia (CANSA) and is the first such document in India that maps the Nationally Determined Commitments of the country with its SDG aspirations.

As part of the national compendium of housing topologies for the Pradhan Mantri Awas Yojana (PMAY-rural), housing designs were developed for the state of Uttar Pradesh. Training modules developed for assistant masons were incorporated in the National Rural Mason Qualification Pack of the Construction Skill Development Council of India.

An input paper, 'The Vision Document for Resource Efficiency and Secondary Resource Management' as a foundation for environmental policy in India and a 'Guiding Document for Policy Makers: Recommendations for an Indian Resource Efficiency Programme' were developed. These were the base documents prepared on behalf of the Indian Resource Panel and presented to the NITI Aayog.



## Policy

This year saw an increased emphasis on research and advocacy partnerships for linking the global SDGs to national and sub-national contexts, promoting resource efficiency in housing, regional alliance for climate change and exploring circular economy issues relevant for India and developing nations.

At the global level, Development Alternatives was a participant at the annual meeting of the Poverty Environment Partnership - a global network steering sustainable development. Development Alternatives represented India's views at the Global Circular Economy Forum at Helsinki. As a member of Multi-stakeholder Advisory Committee of the Sustainable Building Programme of UNEP-10YFP, Development Alternatives is now supporting a global initiative to enhance resource efficiency in social housing.

At the national and sub-national levels, dialogues and associations with civil society networks on themes of resource efficiency, resilient agriculture systems and climate change have been rolled out to build a shared perspective on green, inclusive and resilient economies relevant for India. As a part of the SDGs framework development in Sikkim, Development Alternatives, as the knowledge partner, supported the design of an institutional framework for operationalising SDGs at the state level.

A major initiative this year has been the support provided to formulate the Indian Resource Panel (InRP) on the lines of the International Resource Panel of UNEP. Led by GIZ, India and in partnership with TERI, Development Alternatives played a pivotal role in bringing together eminent policy makers, present and retired to dwell on the concerns of resource efficiency in the economic development of the country.



*... Going forward, in the years to come, Development Alternatives will focus on building capacities of Common Interest Groups and Civil Society Organisations for multiplication at scale and establishing SHG Federations as project partners and delivery channels for the market of communities at the bottom of the economic pyramid. For building a strong network of businesses, Development Alternatives will engage with industry confederations and CSR platforms. At the policy level too, the way ahead would be to engage in multi-stakeholder dialogues and build corridors for influencing policy.*





# Significant Events

## TARAgam Yatra

Development Alternatives (DA) organised TARAgam Yatra (TGY) 2016 on the theme, 'Policy Shifts for Implementing the SDGs in India' from 20th-22nd September 2016. TGY is an annual event designed to deliberate on issues of development and sustainability in policy and practice.

The event was launched through trialogue2047 on 'Economic Transitions to Achieve Sustainable Development Goals'. trialogue2047 aimed to identify the shifts required in policies, planning systems and

practices of government, businesses and civil society. It explored economic principles that promote the well-being of the people and the planet. The key speakers were from various backgrounds, such as Environmental Economics, Sustainable Development, Resource Conflicts and Climate Change.

The second day of the Yatra witnessed five parallel Roundtable Consultations on Food, Resources and Livelihoods; Sustainable Social Housing; Integrated Village Development (Hamara Gaon); Climate Change and WASH; and Drivers for Employment and



Entrepreneurship. These Roundtable Consultations brought together top-level practitioners and policy makers from across the nation to build hope and create space for transformation. With a mix of dialogue and field visits, the Yatra provided a platform to address the need for policy shifts for implementing SDGs in India.

The event culminated as a Plenary Session on the third day in Delhi. It provided a platform to recapitulate the experiences of the yatris and discuss interpretations of the three-day event, with concluding remarks and recommendations. The first session was on 'Policy Transitions for SDG Implementation in India', while the second one was on 'Priorities for India within the SDG Framework'. It witnessed participation from speakers from NITI Aayog, State Planning Commission, CSR, Academic Institutions and Civil Society Organisations.

TARAgam Yatra 2016 was organised in partnership with TARA, HBF, GIZ, GEC, CII, CII-ITC, BMTPC, "laCaixa" Banking Solutions, CSA, UNICEF, UNDP and NABARD.

### trialogue2047

trialogue2047 is a series of discussions focused at building consensus on directions and measures India



must take to accelerate a transition towards a truly sustainable future.

Since the inception of this idea, DA has organised 18 trialogue2047 linked to sustainability. In the last financial year, 5 trialogue were held on: Exploring Synergies between Decentralised Renewable Energy and Livelihood Creation; Urban Affordable Housing: Decoupling Material Resources; Economic Transitions to Achieve SDGs; Farmer Collectives driving Eco-System Resilience and Livelihood Security; Celebrating the Philosophy and Practice of Laurie Baker.

Experts were from diverse backgrounds, including the field of Energy, Business, Architecture, Economics, Housing and Livelihood.





**Decoupling  
Energy  
and Resource,  
Delhi,  
25<sup>th</sup> May 2016**



**Women Federation Cluster on  
Income Generation Activities,  
Madhya Pradesh, 14<sup>th</sup> August 2016**



**Renewable Energy and  
Resilient Livelihoods,  
Delhi, 6<sup>th</sup> April 2016**



**GGKP Annual  
Conference,  
Republic  
of Korea,  
6<sup>th</sup>-7<sup>th</sup> September  
2016**



**Exposure visits  
of FPOs,  
Uttar Pradesh,  
Rajasthan  
21-23<sup>rd</sup>  
November 2016**



**Radio  
Programme,  
Production  
Madhya  
Pradesh,  
9<sup>th</sup>-15<sup>th</sup>  
December 2016**



**Consultation on Rural Housing, Uttar Pradesh, 20<sup>th</sup> April 2016**

**COP-22:  
Action of DA,  
Marrakech,  
Morocco,  
16<sup>th</sup> October, 2016**



**Mainstreaming Sustainable Social Housing in India, Delhi, 8<sup>th</sup> February 2017**



**Indo-Pak Dialogue on Building Climate Resilience, Delhi, 12<sup>th</sup>-13<sup>th</sup> May 2016**

**WASH School Ambassadors, Alwar, Rajasthan, Oct - Feb 2016-17**



**Resource and Climate Protection, Karnataka, 25<sup>th</sup> October 2016**













# DA in the News

## 3-Day sustainability event ends in New Delhi



**T**he three-day event, which was held at the New Delhi Convention Centre, was a landmark occasion for the country's sustainability community. It brought together over 500 professionals, academics, and policymakers from across the globe to discuss the latest trends and challenges in the field of sustainable development. The event was organized by the United Nations Development Programme (UNDP) in collaboration with the Indian government and various international organizations. The three-day event was a landmark occasion for the country's sustainability community. It brought together over 500 professionals, academics, and policymakers from across the globe to discuss the latest trends and challenges in the field of sustainable development. The event was organized by the United Nations Development Programme (UNDP) in collaboration with the Indian government and various international organizations.



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## The Times of India

### People's Ideas: Mainstreaming innovation at the grassroots



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**THE TIMES OF INDIA**  
THE TIMES OF INDIA, LUCKNOW  
TUESDAY, AUGUST 23, 2016

## 18k women appear for open varsity test

**Lucknow:** Around 18,000 neo-literate women from east UP appeared in National Institute of Open University examination on August 21. The exam was conducted under the umbrella of 'Tara Akshar' programme conducted by Development Alternatives in collaboration with BSA. About 8,500 women from Jaunpur, 3,000 from Mirzapur and 6,500 from Bhadohi participated. The programme has been implemented in Delhi, Bihar, MP, Jharkhand, Uttarakhand, UP, Rajasthan and Haryana. **TNN**

## दहलीज पार की, आसमां हो गया अपना



**पलार्ड-ऐरा ईट अधिक किरफायती और गुणवत्तापूर्ण**  
लखनऊ: पलार्ड-ऐरा ईट अधिक किरफायती और गुणवत्तापूर्ण। The event was a landmark occasion for the country's sustainability community. It brought together over 500 professionals, academics, and policymakers from across the globe to discuss the latest trends and challenges in the field of sustainable development. The event was organized by the United Nations Development Programme (UNDP) in collaboration with the Indian government and various international organizations.

## पलार्ड-ऐरा ईट अधिक किरफायती और गुणवत्तापूर्ण



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## Radio, lifeline of common man

**As an indispensable part of the World Radio Day on September 13, the JIPM is celebrating the 100th anniversary of the birth of the radio.**



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## आज

समयपत्रिका, 23 मार्च, 2016

## महिलाओं में वितरित किया गया प्रमाण पत्र



The event was a landmark occasion for the country's sustainability community. It brought together over 500 professionals, academics, and policymakers from across the globe to discuss the latest trends and challenges in the field of sustainable development. The event was organized by the United Nations Development Programme (UNDP) in collaboration with the Indian government and various international organizations.



# Awards and Achievements



TARA Akshar+ Literacy Programme receives the 2016 WISE Award: for 'combatting illiteracy through a computerised literacy programme.' This Programme was one of the six winners that "demonstrated a positive impact on society".



UNEP Science-Policy Lifetime Award: Dr. Ashok Khosla was bestowed with the UNEP Science-Policy Lifetime Award for his services to the environment and the betterment of the lives of others. He was honoured with the award at a reception on 19th May 2016, at the UNEA Science Policy Forum.

# Publications

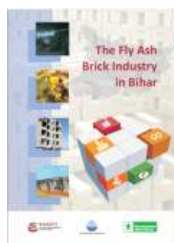


## **Aao Jane WADI ke Bare Main: Booklet**

This booklet explains the steps of preparing a WADI. This is a very good mixture of interesting content and pictorial visuals. WADI is a process by which barren land is rejuvenated and made green by sowing local plants and trees.

## **Achieving Resource Synergies for a Rapidly Urbanising India**

This document is an outcome of a project titled "Achieving Resource Synergies for a Rapidly Urbanising India", funded by Heinrich Boll Foundation, for the economic development, social empowerment and environment management of our society. This Background paper is intended for use by policy-makers, academics, media, government, non-government organisations and general public, for guidance on matters of interest only, and does not constitute professional advice.



## **Fly Ash Brick Industry in Bihar: Report**

This report tracks the growth of the fly ash brick industry by tracking the number of enterprises in the state and assessing the status of these units, through individual surveys from fly ash brick enterprises across the districts of Bihar, to estimate the supply of fly ash bricks and also to assess the quality of bricks produced by these units across the districts of Bihar.



## **Farmer Producer Organisations in India: Case Study Compendium**

This Case study Compendium incorporates the background, approach, business performance and SWOT of six Farmer Producer Organisations (FPOs) actively working in India.

## **Household Water Treatment and Safe Storage (HWTS) in India: Learning Document**

This learning document covers main learnings of the work done on Household Water Treatment and Safe Storage (HWTS) implementation by Development Alternatives in the last eight years. The objective is to facilitate a space for exchange of ideas and enable reach of learnings related to HWTS initiatives to masses.



## **Market Study on Construction & Demolition Waste Utilisation in Ahmedabad: Report**

This report provides an analysis and evaluation of Construction & Demolition (C&D) waste management scenario in Ahmedabad and proposes suitable strategies to enhance the processing and utilisation of C&D waste.

## **National Green Economy Barometer Scoping the 'Status of the Transition'**

This document acts as a diagnostic of the status of transition towards a green, fair and inclusive economy in India, i.e. an economy that provides a better quality of life for all within the ecological limits of the planet. Tracking Global Goals in India: Report



This report describes the existing statistical capacity of India, while highlighting the challenges, gaps and opportunities to track the SDGs. It further explores the extent to which existing Indian indicators are aligned with global requirements, i.e. the IAEG-SDG indicators, as well as in the local context; and provides recommendations to policymakers and stakeholders with a purpose of strengthening data systems for the indicators.

### **Water Sanitation and Hygiene to Improve Human Health (English & Hindi): Training Package**

The HWTS programmes of Development Alternatives facilitate and provide technical assistance on urban health and health determinants. WASH, being a key determinant of health, necessitates access of the urban poor to safe WASH practices, thus leading to better health outcomes & well-being and reducing poverty.

### **Policy Brief**

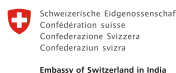
- Bhamra, A.; Farhan, A.A. Syed; Niazi, Z. 2016. New Delhi: "Avenues of Alignment between Sustainable Development Goals and the Paris Agreement in India". Development Alternatives. 37p.
- Bhamra, A.; Hajra, M.; Niazi, Z. 2016. New Delhi: "Farmer Producer Organisation in India". Development Alternatives. 12p.

### **Perspective Paper**

- Sekhar, Achu R. 2017. New Delhi: "Fly Ash Brick: An Alternate Ecofriendly Brick Technology". Quality Edge. 20-22p.
- Khosla, A.; Potocnik, J. 2016. "Examining the Environmental Impact of Demand-Side and Renewable Energy Technologies". Journal of Industrial Ecology. 216-217p.
- Srivastava, A.; Mangrulkar, A. 2016. "Credit Based Eco-Housing Model for Rural Areas, Indian Building Congress". Vol.23 I, 157-166p.
- Emmanuel, A.; Haldar, P.; Maity, S. and Bishnoi, S. 2016. "Second pilot production of limestone calcined clay cement in India: The experience". Indian Concrete Journal. Vol. 90, 57-64 pp.
- Pandey, S.N.; Singh, R. et.al. 2016. "Sustaining farm productivity through watershed based participatory balance nutrient management: A case study from Semi-Arid Tropics of central India". Indian Journal of Soil Conservation. Vol. 44, 13-18p.
- Niazi, Z. 2016. "Affordable eco-housing for the Masses, Eco Construction". Review Magazine. 14-15p.
- Niazi, Z. 2017. New Delhi: "New Economy Paradigm to Achieve Sustainable Development Goals". National Conference on Partnership for Sustainable Development Goals. 5-7p.
- Misra, S.; Koneru, V.L. "Reaching the Last Mile Technology Solutions and Models for Service Delivery". 8p.



# Partners and Collaborators





Empowered lives.  
Resilient nations.



# Board of Directors



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IIT, Delhi



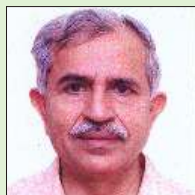
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Jawaharlal Nehru University



**Dr. Arun Kumar**  
President  
Development Alternatives



**Mr. George C. Varughese**  
President  
Development Alternatives



# Compliance

## Auditors' Report

Society for Development Alternatives  
Balance Sheet as at 31 March 2017

	Schedule	As at 31 March 2017 ₹	As at 31 March 2016 ₹
<b>Sources of funds</b>			
<b>Capital</b>			
Capital and other funds	1	2,11,81,509	3,70,08,363
<b>Liabilities and provisions</b>			
Unspent grants	2	5,72,94,000	7,30,55,679
Current liabilities	3	72,66,014	62,30,779
Provisions	4	18,11,587	20,32,262
		<u>8,75,54,209</u>	<u>12,12,16,977</u>
<b>Applications of funds</b>			
<b>Fixed Assets</b>	5	2,18,54,555	2,55,03,292
<b>Current assets, loans and advances</b>			
Cash and bank balances	6	4,77,99,838	7,97,26,544
Loans and advances	7	1,72,53,237	1,75,08,941
Other current assets	8	6,40,541	6,08,420
		<u>6,56,99,586</u>	<u>9,79,13,715</u>
		<u>8,75,54,209</u>	<u>12,12,16,977</u>
<b>Significant accounting policies and notes to the financial statements</b>	13		

The schedules referred to above form an integral part of the financial statements.

This is the Balance sheet referred to in our report issued in Form No 10B of the Income Tax Rules, 1962 of every date.

*Walker Chandank & Associates*  
By Walker Chandank & Associates  
Chartered Accountants

*Nitin Toshniwal*  
For Nitin Toshniwal  
Partner

For and on behalf of the Society for Development Alternatives

*George L. Varghese*  
George L. Varghese  
President

*Vinod Nair*  
Vinod Nair  
GM Finance

Place : New Delhi  
Date : 22 July 2017



Society for Development Alternatives  
Income and Expenditure Account for the year ended 31 March 2017

	Schedule	Year ended 31 March 2017 ₹	Year ended 31 March 2016 ₹
<b>Income</b>			
Grant income	2	19,62,07,342	33,12,38,525
Other income	9	18,31,187	1,10,10,628
		<u>19,80,38,529</u>	<u>36,22,58,153</u>
<b>Expenditure</b>			
Grant expenses	2	14,19,82,873	28,92,30,162
Personnel cost	10	5,74,16,683	5,51,00,350
General and administrative expenses	11	1,30,18,628	1,29,31,101
Depreciation and amortization	5	23,23,474	24,60,683
Finance costs	12	23,536	7,95,572
		<u>21,47,65,193</u>	<u>36,05,23,868</u>
(Deficit)/Surplus for the year transferred to capital and other funds		(1,67,26,664)	17,31,285

Significant accounting policies and notes to the financial statements 13

The schedules referred to above form an integral part of the financial statements.

This is the Income and Expenditure Account referred to in our report issued in Form 10B of the Income Tax Rules, 1962 of even date.

*Walker Chandniok & Associates*

For Walker Chandniok & Associates  
Chartered Accountants

For and on behalf of the Society for Development Alternatives

  
for Nitin Toshniwal  
Partner



  
George C. Varughese  
President

  
Vinod Nair  
GM Finance

Place : New Delhi

Date : 22 July 2017

[illegible]

**[Simplicity]**

The new extended the Federal System of Forestry and Development Administration (Sistema Federal de Fomento y Desarrollo Forestal) and the National Institute for the Management of the Forest (Instituto Nacional de Manejo Forestal) under the Ministry of Agriculture, which is the official body in charge of the forest management in the country.

3. The authors explain that the use of a common, standard, and dated 1000-hour "minimum" for licensure in the field of nursing is "admittedly arbitrary" (1997, p. 699) and that the "National Council of State Boards of Nursing" (NCSBN) is "currently studying" the issue (1997, p. 700). The authors state that, having been asked to do this, the authors of the study at hand have been reluctant to do so, but they agree, and are more concerned in the current manuscript, with the finding that the majority of the respondents are not in favor of the current standard. It is noted that the "survey was mailed to all of the nursing programs in the United States" (1997, p. 700) and that the "survey was mailed to all of the nursing programs in the United States" (1997, p. 700). The authors state that the "survey was mailed to all of the nursing programs in the United States" (1997, p. 700) and that the "survey was mailed to all of the nursing programs in the United States" (1997, p. 700).

*J. de la Falga and S. Ghera, "A note on the isomorphism of  $(\mathbb{Z}/p\mathbb{Z})^*$  and  $(\mathbb{Z}/p^2\mathbb{Z})^*$ ,"*

5. Our audit of financial statements was conducted in accordance with the Standards on Auditing issued by the Institute of Chartered Accountants of India. These Standards require us to comply with certain requirements and plan and perform the audit in a way to obtain reasonable assurance about whether the financial statements are free from material misstatement.

Walter Brueggemann, Jr., Secretary  
for Walter Chaudhry & Associates,  
Chartered Accountants  
1000-100th Avenue, N.W. • 10050N

Place: New Delhi  
Date: 22 June 2017





# Credibility Alliance

## Identity

Society for Development Alternatives is registered as a not-for-profit society under Society Act. XXI of 1860 (Registration number 12964).

Society for Development Alternatives is registered under Section 6 (1) (a) of the Foreign Contribution (Regulation) Act, 1976 (FCRA Reg. No. 231650202).

Visitors are welcome to the addresses given on the “contact us” link on our website: [www.deval.org](http://www.deval.org)

Name & Address of main bankers:

Syndicate Bank, R K Puram, Sector - V  
New Delhi - 110 022, India

Name & Address of auditors:

M/S Walker Chandio & Co.  
L-41, Connaught Circus  
New Delhi - 110 001, India

Regular Staff	Male	Female	Total
<2500	0	0	0
<7000	0	0	0
<15000	4	1	5
<30000	12	4	16
<50000	18	27	45
>50000	11	6	17
<b>Grand Total</b>	<b>45</b>	<b>38</b>	<b>83</b>

Staff Details (as on March 31, 2017)

Gender	Regular Staff	Senior Advisors	Consultants	Project Appointees
Male	45	05	15	16
Female	38	0	02	03

Distribution of Staff (as on March 31, 2017)

## Governance

None of the Board Members are related to each other.

The Development Alternatives Board Members met twice in the FY 2016-17, on 09<sup>th</sup> November 2016 and 09<sup>th</sup> March 2017.

Minutes of Board Meetings are documented and circulated.

## Accountability and Transparency

No sitting fees or any other form of compensation has been paid to any Board Member, since the inception of the Society for Development Alternatives.

# Business Affiliates

Over the past year, the business affiliates of Development Alternatives were restructured to enable the DA Group to massively scale up the solutions for sustainable development it has evolved over its thirty-five years of research, analysis and operation.

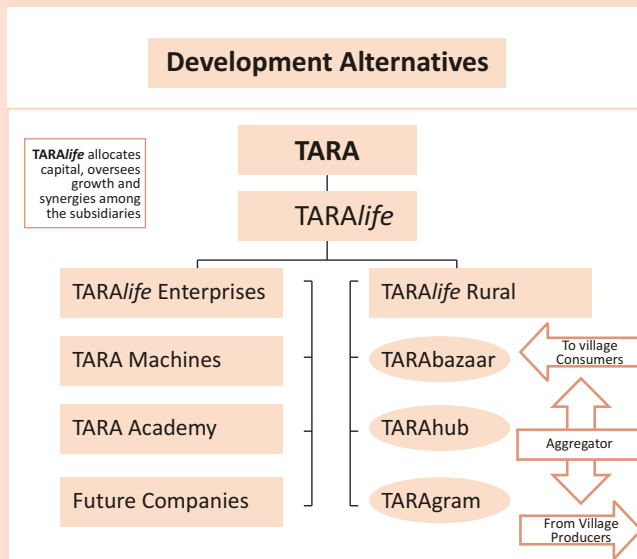
**Technology and Action for Rural Advancement (TARA)** continues to be the primary partner of Development Alternatives, acting as the “incubation engine” of the Group. The mandate of TARA, which was set up in 1985, is to test, adapt and productionize the innovations of DA and make them ready for dissemination, primarily through market channels. TARA is registered as a Society and can carry out limited commercial activities, primarily in the domain of consultancy services.

TARA, in turn, has promoted a company under the Companies Act, named **TARAlife Sustainability Solutions Pvt Ltd (“TARAlife”)** with the purpose of rapidly speeding and scaling up the dissemination of TARA-incubated technologies and solutions.

TARAlife is a holding company mandated to set up and support subsidiary companies and commercial units to create livelihoods in rural communities and to bring transformative products into the rural market. The equity capital of TARAlife is owned primarily by TARA and the balance by other commercial investors. The profits generated from the operations of TARAlife are used for distribution of dividends to the investors, enabling TARA to finance the innovation and other research activities of Development Alternatives.

TARAlife with its operating divisions and its subsidiaries is a group of companies set up to commercialize technologies, products and services that are proven in the market and have demonstrated a potential for scale. They function as independent bodies within the Development Alternatives Group, with experienced professional managers at the helm.

## DA Group Social Enterprises



TARAlife has several subsidiary companies, including:

**TARAhubs : Points of Presence** TARAlife Rural's last-mile connectivity with village customers will be enabled by strategically located “TARA hubs” mini-malls where sale of incoming products and aggregation of exports will create a commercially viable marketplace.

The primary function of the **TARAhub** is to provide operating facilities for TARAbazaar, TARAGram, TARA Machines, TARA Livelihood Academy and other TARA companies. Space will also be rented to external partners for financial services, IT and mobile repair services and such retail outlets as beauticians, tailoring, household appliances. The facility will be powered by a TARA Urja unit, a sister concern under the TARA umbrella, using solar and other renewable energy, ensuring reliable power for the facility and enabling the unit to sell its surplus power off-site to neighboring clients. TARAhubs will vary in size, the two primary types that are being targeted over the next five years being:

#### **TARAbazaar: Delivery INTO the village**

Despite growing aspirations, increasing purchasing power, and vast unmet needs, the village consumer is still largely underserved today. Remote, ill-connected markets are costly to service and most business models that rely on limited revenue streams cannot generate adequate revenues to cover these costs. TARAbazaar will deliver a wide range of “quality of life” products and services to village customers, thus reducing customer acquisition and distribution costs.

These products include a variety of basic-need fulfillment products, across water purification, devices for lighting and energy, preventive healthcare and clean cooking fuel. The average purchasing power per capita across the target geographies is INR 3,000 (approximately \$ 50) for non-food products. The products represent a mix of daily, weekly or monthly consumables, as well as one-off purchases.







### **TARAGram: Pick up from the village**

TARAGram increases local incomes through marketing of value-added products made in local village production centers, using efficient technologies many of them supplied by TARA Companies to process local or recycled materials. TARAGram will establish production centers across UP, MP and Bihar, to make handmade paper and fabric and textiles out of recycled waste material, products from the paper and textiels, processed foods and traditional medicines, domestic products and other revenue generating activities.

Through this, TARAGram will continue to provide livelihood security for village communities, creating employment and home-based income generation opportunities for women organized in producer groups, as well as productivity enhancement, quality assurance, value addition and aggregation services.

Sufficient revenue/value is always built into the value chain for each stakeholder of the supply chain making the total delivery system financially sustainable. By fulfilling basic needs and promoting livelihood security it will build an unmatched brand equity.

The 3 Pillars of TARAlife's rural presence, the TARAhubs, TARAbazaar and TARAGram are, together, the key supports for the local community to generate a new and vibrant economy.

### **TARA Machines:**

TARA Machines & Tech Services Pvt Ltd ("TARA Machines") develops and markets innovative green building and waste to wealth solutions for micro, small & medium enterprises. The USP of TARA Machines is the capacity to deliver total business solutions to green building material entrepreneurs and recycling enterprises, with strong focus on technical support, material and product testing, training and regular servicing. TARA Machines expects to establish over enterprises producing building materials in the next five years.



### **TARA Livelihood Academy (TLA):**

TARA Livelihood Academy (TLA) provides training packages for empowerment, employability and entrepreneurship, with strong market linkages for livelihood fulfillment. For the TARAlife business ecosystem, TARA Livelihood Academy's Employability and Entrepreneurship training programs will supply skilled professionals for TARAGram, TARAbazaar and the TARA hubs. Till date, TLA has successfully built capacities of around 31,000 people from different categories, around 70% of whom have been successful in gaining sustainable livelihoods. Currently, a unit with turnover of INR 22 Mn (\$ 0.3 Mn), TLA is poised for a quantum jump in the next 5 years.



### **Other TARA Business Affiliates**

TARA Urja, which has pioneered successful establishment and operation of “mini-grids” to deliver decentralized solar energy to village households and businesses in a commercially viable manner.

TARA Haat, which is the leading provider of literacy and numeracy skills for adults, particularly women, in rural India.





## The Development Alternatives Group

Development Alternatives (DA)  
[www.devaltd.org](http://www.devaltd.org)

Technology and Action for Rural Advancement (TARA)  
[www.tara.in](http://www.tara.in)

TARAhaat Information and Marketing Services Ltd.  
[www.tarahaat.com](http://www.tarahaat.com)

TARAlife Sustainability Solutions Pvt. Ltd.  
[www.taralife.in](http://www.taralife.in)

TARA Machines and Tech Services Pvt. Ltd. (TMTS)  
[www.taramachines.com](http://www.taramachines.com)

TARA Livelihood Academy Pvt. Ltd.

Decentralised Energy Systems India Pvt. Ltd. (DESI Power)  
[www.desipower.com](http://www.desipower.com)

 **Development Alternatives**

 **TARA**

 **TARAhaat**  
*Computer Skills for Jobs*

 **TARAlife**

 **TARA Machines**  
& Tech Services Pvt. Ltd.

 **TARA Academy**  
*Real Skills... for Real Jobs*

  
D.E.S.I. Power <sup>TM</sup>