



Development Alternatives

delivering eco-solutions for people and the planet



Origins – the Philosophy

When Development Alternatives was set up in 1982, the Republic of India was 35 years old. The top-of-mind issues of the time were to maximize agricultural and industrial production and feed, clothe and shelter a rapidly growing population 50% of whom were below the poverty line. National development strategies then, relied on a command and control economy prioritizing big industry, big dams and higher education over rural livelihoods, renewable energy and primary education. Our mission then, was to find an answer to the Central Question: How do we eradicate poverty and rebuild the health of our environment, despite the highly lop-sided approach that our nation had fallen into?

In the 21st century today, much has undeniably changed, yet more of it remains the same. Agriculture productivity and industrial development has increased manifold; telecommunication has virtually linked the whole country; modern goods and amenities are widely available for those who can afford them. On the other hand, we have a population approaching 1,300 million with about 30% still in abject poverty. The economic divide, disempowerment of women and joblessness are reflected in the increased social and political strife. Our soils, forests, rivers, aquifers and grazing

lands are in worse shape than at any time in the history of our land. Our energy-guzzling methods are blowing a gigantic hole in our balance of payments. Climate change and biodiversity loss have put the growing unviability of our future on a fast track.

So, it is not just a moral imperative to eradicate poverty, but an economic one and above all an ecological one as well.

The work of Development Alternatives and like-minded organisations in the civil society of India is clearly not finished. Indeed, it has become even more urgent. If we are to eradicate poverty, provide human security and bring back our forests, rivers and soils, we must follow a totally different development path. An *ALTERNATIVE* path of development that directs innovation of technologies and institutions for the benefit of everyone, including the poor; markets with a human face and governance that is local, transparent and enabling. A path that empowers communities and puts people in charge of their own lives.

The task of the Development Alternatives Group has become even more vital and urgent for the future of India than it was when it was born.





Rebuilding a Nation – the Dream

Sustainable development – in which human and planetary well-being are the aim of economic growth – needs policies that balance environment friendly local and decentralised production processes with large-scale industrial development. It requires a culture of zero waste, a design for energy and resource efficiencies, no tolerance to pollution and a prioritization of basic needs and humanistic values over affluent greed.

Sustainable development needs holistic, systemic interventions that enables societies and communities to define their own problems and design appropriate solutions. This means building the technical, managerial and financial skills of people, setting up robust decision support systems, and creating institutions of local governance capable of managing resources for the benefit of the community.

The first step towards sustainable development is to create sustainable livelihoods on a large scale. Sustainable livelihoods produce goods and services that are needed to better the lives of the people. They create purchasing power, and with it greater economic and social equity. Being environment-friendly, they minimize waste, use renewables and conserve resources. To break out of the present poverty-pollution-population trap, a young and dynamic country like India needs to create, millions of sustainable livelihoods.

Sustainable livelihoods need sustainable enterprises. And sustainable enterprises need sustainable technologies, sustainable financing systems and sustainable management methods. This chain of reasoning quickly leads us to innovate, finance and manage our resources in a completely different way so that everyone can benefit from the social and economic progress in society.

Development Alternatives has taken a no alibi, no excuse responsibility to strike out on new paths that lead to the creation of sustainable livelihoods. To create new types of technologies and institutions, we have built up an effective capacity to innovate on the ground. To multiply and scale up, we have chosen the viral replication approach of the business enterprise and the marketplace. To ensure that the technologies and markets stay true to the purpose of sustainability, we have chosen the local, the decentralized and the renewable over the big, the concentrated and the non-renewable. And to facilitate the enterprises with support systems to innovate, finance and market their sustainable solutions, and lobby for better policies; the Development Alternatives Group has chosen its primary job as that of a **social enterprise enabler**.





A Pioneering Social Enterprise

The Development Alternatives Group (DA Group) was the first social enterprise setup to create and deliver sustainable solutions for social and economic development.

Established in 1982 and headquartered in New Delhi, the DA Group pioneered the concept of business-like approaches for eradicating poverty and conserving the natural resource base on which human development depends. Over the years, it has built up a global presence in the fields of green economic development, social equity and environmental management. It has also built up a strong reputation as an innovator of technologies and delivery systems for sustainable livelihoods in the developing world.

Partners and clients of the DA Group include village communities, civil society organisations, local and state governments, agencies and ministries of the Government of India, multilateral agencies and private sector institutions across India and in other parts of the world.

The DA Group's research and field activities have led to numerous innovations in concepts, methods, approaches, tools and techniques that promote sustainable livelihoods at a large scale. These include commercially-viable technologies and environmental management systems in affordable housing, green building materials, renewable energy, safe water, eco-sanitation, land improvement, waste recycling - including handmade paper, handloom textiles and training programmes from basic literacy to entrepreneurship. Its interventions reach communities through local partners that include community based organisations, commercially viable micro and small enterprises, and local governments.

The DA Group has contributed to national and global policy development on issues of human and planetary well being. Its work has influenced national, regional and global discourse on sustainable development including green economy, social equity and climate change concerns.





Vision, Mission and Approach

Vision

A world where every citizen
can live a healthy, secure
and fulfilling life

Mission

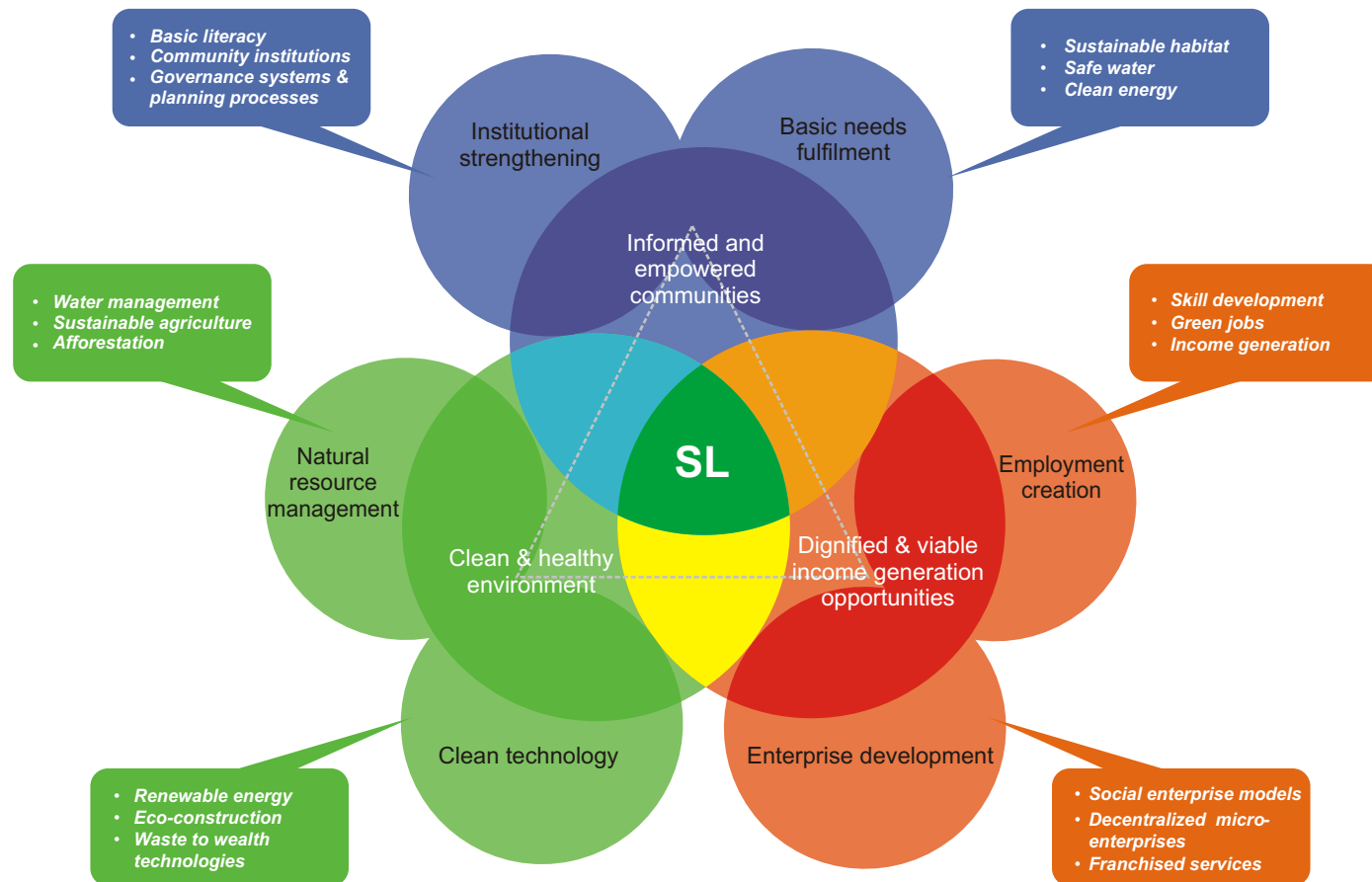
To create models
that generate
sustainable livelihoods
in large numbers

Approach

Innovation, implementation
and influence to create
large scale impact

*The Development Alternatives Group is dedicated to bringing about a better balance among the basic prerequisites of sustainable development - **social equity, environmental quality and economic efficiency**. The Group believes that the key to achieve sustainable development is the creation of sustainable livelihoods. This implies that informed and empowered communities have access to the basic goods and amenities they need, dignified and viable income generation opportunities and a clean and healthy environment.*





Programmatic Focus

The Development Alternatives Group seeks to deliver sustainable development products and services to fulfill its mission to promote sustainable national development through measures that foster the creation of sustainable livelihoods in large numbers.

Activities of the DA Group broadly cover three primary areas that underlie any form of sustainable development process:

- Design and large-scale dissemination of appropriate technologies
- Rational environmental management systems
- Equitable people-oriented institutions and policies.

Technologies, management systems and institutional structures are designed to be disseminated through methods that are highly scalable. Development Alternatives and its affiliates and partners market the sustainable development concepts, methods and enterprise applications in a commercially viable manner to an ever-growing body of consumers.

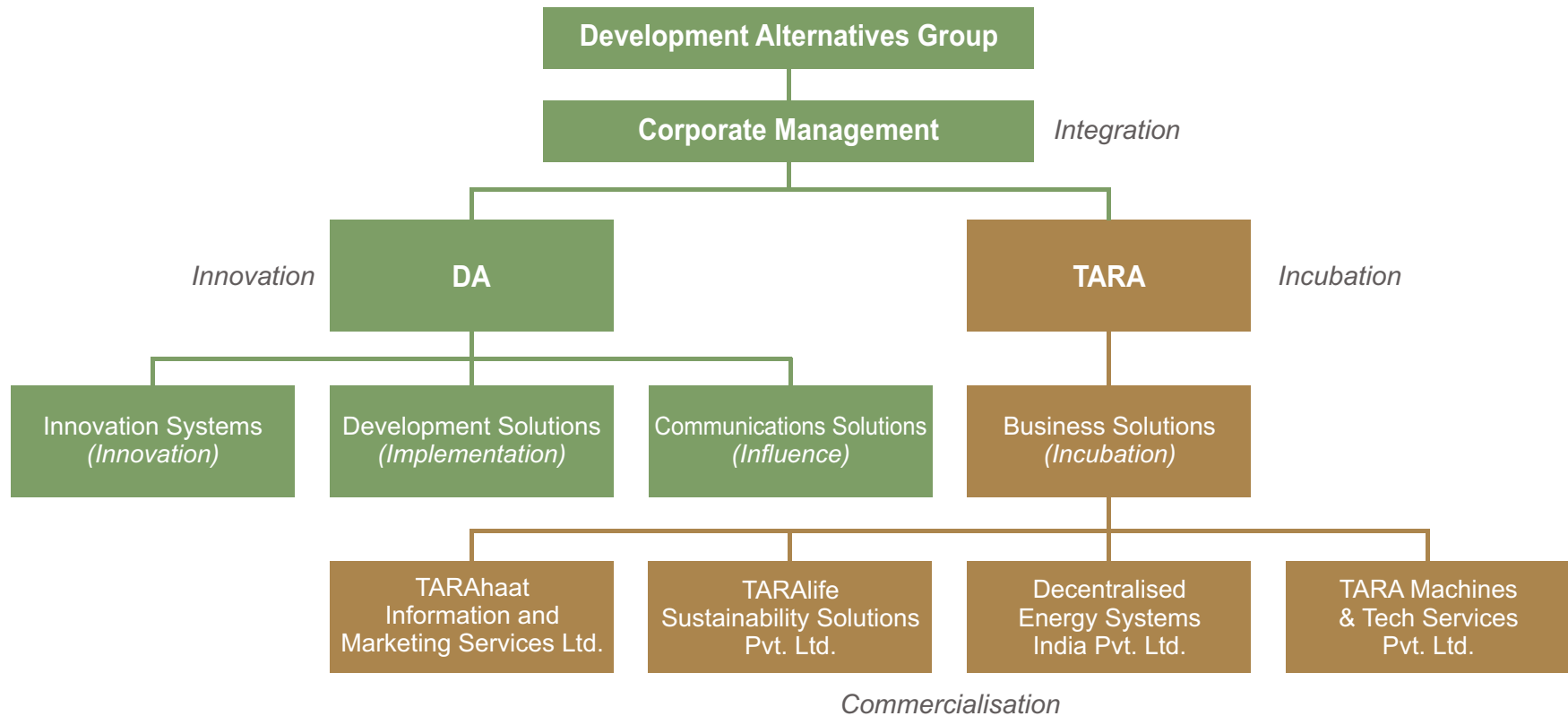
The work of the Development Alternatives Group encompasses:

- **Empowering Communities** through multi-stakeholder action for
 - Strengthening social institutions *with a focus on women and marginalised groups*
 - Fulfilling access to basic needs *specifically habitat, water and energy*
- **Promoting Low Carbon Pathways** for development through the design and demonstration of
 - Natural resource management models
 - Clean technology solutions
- **Creating Green Jobs at a large scale** through capacity building for
 - Employment skills in green sectors
 - Business models *for social enterprises*

The strategic drivers are innovation of eco-solutions, incubation of enterprise based business approaches, demonstration and implementation of eco-solutions at scale and influencing practice and policies towards sustainable development.



The Basic Organogram



Development Alternatives Group – The Business Model

The Development Alternatives Group comprises independent organisations Development Alternatives (DA) and Technology and Action for Rural Advancement (TARA), which in turn has a number of affiliates registered as for-profit companies.

DA is a not-for-profit organisation registered under the Indian Society's Act and its income is tax-exempt. Donations and grants to it are tax deductible by the donor. It is mandated to do research, field demonstrations and pilot projects. It does not conduct regular business activities. It engages in scientific research and innovation, demonstration of eco-solutions and communication, policy advocacy and capacity building to disseminate its innovations at scale.

TARA is a registered society and has a mandate to do business, act as a business and pay taxes like a business. Its profits are reinvested in the organisation.

While each organisation has distinct mandates, decision making processes, financial accounting systems and governance structures; they have complementary strategies - DA creates the technical innovations, and

TARA does the actual business development and puts the innovations into the market. TARA pays license fees to DA. The two organisations share common services and work together in joint projects under appropriate contractual agreements.

In its earlier years, DA's funding primarily came from project grants and donations received from governments, foundations and international agencies. It has a very limited endowment fund. Its innovations, which are licensed to TARA and other manufacturers, are designed to bring a growing stream of royalty income, which over time, is expected to become the primary source of finance.

Development Alternatives helps develop convergence with public welfare programmes and leverages several times its turnover through community contributions, government and private funding. Its primary funding needs are for building up its research facilities and employing creative staff of the highest quality. The DA Group also seeks to raise financing to scale up the operations of the TARA companies. These companies are currently TARA Machines, TARAlife, TARAhaat and DESI Power. Business plans are available for each of these companies.





Development Alternatives – The Innovation Engine

The innovation activities of Development Alternatives are in the realm of research and design, monitoring and evaluation studies, education and training, networking and grassroots support, pilot demonstration, communication and social and policy research.

Project research conducted by DA has led to several innovations in concepts, methods, approaches, technologies, tools and techniques that contribute to social equity, economic efficiency and environmental quality, while fulfilling basic needs and creating a large number of sustainable livelihoods.

These innovations are characterised by a strong focus on resource-efficiency, drudgery reduction, decentralised management, local wealth generation and inclusive development. While being pro-poor, pro-women and pro-environment technology and livelihood solutions developed by DA are designed to be mainstreamed within market mechanisms.

Some of the pioneering technological innovations of Development Alternatives include, the TARA micro concrete roofing tile maker, the TARA *Balram* earth block press, TARA eco-concrete equipment for prefabricated building products, the TARA Fly-Ash brick equipment and the TARA ecokiln.

The TARA-101 cook stoves, TARA water testing kits, TARA-water purification systems and affordable eco-housing delivery models have provided clean habitats for millions of families in rural India. TARA recycled paper technology, TARA handlooms and TARA enterprises have helped create green jobs. The TARA water management systems, check-dams and decentralised renewable energy systems have promoted sustainable livelihoods across the country. The ICT based TARA Akshar adult literacy programme has enabled tens of thousands of women to read and write and coupled with skill based training is helping them enter the formal economic mainstream.





TARA – Incubating Businesses for Implementation at Scale

Technology and Action for Rural Advancement (TARA): is a not for profit flagship entity set-up in 1985 in association with the parent institution Development Alternatives. Its mission is to “build capacity, incubate business models and manage processes to create economic, social and environmental value on at a large scale”.

As a 'technology incubator', the primary function of TARA is to nurture green business solutions for environment and development challenges faced by communities, governments and private sector both nationally and globally.

TARA functions as an 'enabler' and is instrumental in the creation of livelihood support systems, training and capacity building for the rural poor and marginalised communities. In its function as an 'aggregator', it bundles support service packages, helps large corporations explore new markets, aggregates the output of local producer groups including micro, mini and small enterprises and connects these groups to market opportunities and develops markets for green and ethical products and services. Governments, large corporations and civil society networks benefit from TARA's expertise as a 'manager' of large awareness creation, environmental action, community development and service delivery programmes in areas such as affordable housing, renewable energy, water management, sustainable agriculture and waste management.

TARA functions through its five lines of business:

- Training and Capacity Building Services led by the TARA Livelihood Academy (TLA) delivers skill development training for green jobs, enterprise training in green sectors and executive training in sustainability issues.
- Green Products and Services connects businesses to consumers and deals with two product lines - TARA paper products and TARA Environment Monitoring Facility (TEMF). It has incubated a special purpose vehicle called TARAlife Sustainability Solutions Pvt. Ltd. to serve rural and urban consumers.
- Livelihoods and Market Access Service addresses the bottom of pyramid consumers and their access to markets. It has identified recycling as a strong area for enterprise development.
- Technology Management Services engages in nurturing the lab-market connections to establish new technologies in the market and to transfer established technologies across south and south-east Asia.
- Programme Management Services works with the private sector and not-for-profit Foundations to design business eco-systems for emerging green economic sectors. Its current focus is on renewable energy and affordable housing initiatives.





TARA Machines

TARA Machines and Tech Services Private Limited (TARA Machines) is a social enterprise of the DA Group promoted by TARA. It was set up in 2009, with a mandate to promote sustainable technology solutions for small and medium enterprises. These enterprises convert locally produced waste into green building material, thus reducing the need for natural resources in the construction sector. As a part of the package for the entrepreneur, it offers services such as material testing, training, financial guidance, market development and after sales service to ensure the profitability of each enterprise.

TARA Machines offers a diverse portfolio of green building materials technology solutions, wood free handmade paper making and paper product technologies and industrial and urban waste recycling technologies.

TARA Machines is the leading technology provider for Fly Ash technology, which is based on the utilisation of waste from coal-based thermal power plants for the production of high quality, affordable fly ash bricks and blocks. The company is continuously innovating the technology and solutions to meet ever increasing market demand.

TARA Machines markets a diverse portfolio of eco-concrete technologies that exemplify highly efficient use of energy intensive materials such as cement and steel. These eco-concrete technologies are cost effective, high quality and locally produced. The TARA Machines portfolio of eco-concrete technologies offers complete business solutions to building material enterprises, contractors and builders, for all elements required to build a house.

The TARA EcoKiln technology is the most energy efficient brick firing technology in the world. It is the leading technology provider for clay brick enterprises and has engineered a revolution in the national and international brick industry. It offers huge savings in fuel cost and pollution levels that are well within environmental norms.

The TARA PaperMek recycling technology is based on cutting edge innovation designed to produce high quality recycled paper at micro to small scale. Its handmade paper is marketed in national and international markets. TARA Machines is also engaged in the 'Greenovation' initiative in collaboration with the Government of the National Capital Region of India, and has established recycling units in over 400 schools and colleges.





TARA Nirman Kendra

TARA Nirman Kendra (TNK), is registered as a Society with its offices in Delhi and Orchha, Madhya Pradesh. It is a Green Building Center of the DA Group set up with initial support from the Housing and Urban Development Corporation of India (HUDCO).

It delivers environment friendly habitat products and services through a portfolio of sustainable technologies and provides advisory support for creating ecological and affordable built environments. It provides green building solutions to a diverse range of private and institutional clients and delivers green building materials for local application in Bundelkhand.

TARA Nirman Kendra works in association with TARA Karigar Mandal, a guild of artisans in central India to provide green design and eco-construction services for individual and group housing, institutional and commercial buildings. It has demonstrated value for money and environmental responsibility through its projects in Madhya Pradesh, Uttar Pradesh, Orissa, Gujarat, Punjab, Tamil Nadu and Puducherry.

In the past, TNK has provided project management services to village redevelopment and reconstruction projects after natural disaster situations such as earthquakes, cyclones and tsunami.

The product and services portfolio of TARA Nirman Kendra consists of:

- Green building design services – housing, schools, community buildings, commercial buildings and village redevelopment plans.
- Green construction services – consultancy in demonstration and application of compressed earth and fly-ash masonry systems, rat-trap technique of wall construction, pre-fabricated plank and joists and ferro-cement roofing systems, micro-concrete roofing, domes, jack-arch and panel roofing and masonry arched opening systems.

It also provides consultancy services in water harvesting, pre-fabricated toilets, and sanitation systems, smokeless chulhas and household level bio-gas plant construction.

- Training Services – TARA Nirman Kendra works with the TARA Livelihood Academy to provide training to artisans, construction supervisors and architects in disaster safe and sustainable construction techniques, quality control measures and green building design.





TARAlife

TARAlife Sustainability Solutions Private Limited is the newest business incubated by TARA. Incorporated in September 2013, TARAlife is mandated to set up systems for last mile fulfilment of basic needs goods and services for the bottom of pyramid market segment.

TARAlife offers a diverse portfolio of environment friendly and affordable products for safe drinking water, home lighting, and cooking for the billions of poor in India and elsewhere in the developing world. Aqua+ a state-of-the-art solution based on WATA technology for ensuring safe drinking water at the point-of-use is its flagship product.

Other products in its drinking water portfolio include the Augacheck vials, Jal-TARA water testing kits, Jal-TARA water filters for removing bacterial contamination and Jal-TARA arsenic filters especially useful for communities that live in regions affected by arsenic contamination. Its dynamic product portfolio is designed to grow through incorporating products ready for its target market innovated by researchers within and outside the DA Group.

The business model of TARAlife Sustainability Solutions Private Limited is based on developing distribution networks across India to reach its products directly to consumers in urban and rural areas. Partner organisations overseas can capitalise on the knowledge that TARA has gained and use it to replicate the TARAlife business model in their respective countries. To help the partner organisations replicate the model, TARA offers services in the form of consultancy in four areas:

- Assist in marketing and market assessments and conducting source water testing, and consumer analysis
- Designing production facilities and helping establish them
- Designing social marketing and distribution models and creating toolkits for different marketing channels
- Mentoring management staff and developing tools for business processes





TARA Livelihood Academy

TARA Livelihood Academy (TLA) was established in 2007 by the Development Alternatives Group as a dedicated vehicle to disseminate know-how. TLA's mission is to provide skills and knowledge to the youth, women, farmers, entrepreneurs and professionals engaged in development initiatives. TLA's services are offered in three streams; Employability Skills, Entrepreneurship Development and Executive Know-how.

Recognising that skills and knowledge are the driving forces of economic growth and social development, TLA aims at providing a robust trained workforce, which is dynamically adjustable to the changing demands of employment and technologies, to the market. With fast changing skill needs in the labour market, TLA focuses on short, relevant and effective courses that help candidates get suitable employment. TLA's placement cell works with employers in the Bundelkhand region to facilitate recruitment.

TARA Livelihood Academy trains rural and urban youth in various vocational and entrepreneurship development skills. Their capacities are built in different areas such as green construction, renewable energy services, waste management, rural communications, social marketing, management of forest committees, micro-planning in diverse emerging green economic sectors.

The Executive training programmes in TLA cater to market driven needs of mid-career professionals working on issues of sustainability. TLA also conducts agency sponsored programmes, directed at fulfilling the needs of working executives from non government organisations, government agencies and the corporate sector.

TLA's Enterprise Development Support Services provides hand-holding support and backward and forward linkages to neo-enterpreneurous for starting and sustaining green enterprise ventures.





TARAhaat

TARAhaat Information and Marketing Services Limited was launched in the year 2000 as an enterprise of the Development Alternatives Group. It creates micro-franchises to deliver IT-enabled education and skill building products to young job seekers.

TARAgyan, the education division of TARAhaat, develops educational courses for the rural and peri-urban population. TARAhaat offers educational and vocational training programmes through its network of franchise partners, known as TARAkendras. These are ICT centres in Uttar Pradesh, Madhya Pradesh, Jharkhand, Bihar, Chhattisgarh, Haryana and Punjab.

TARA Akshar is the most popular innovation of TARAhaat. It is an ICT based adult literacy product designed to enable totally illiterate women to read and write Hindi in a span of 37 days (74 contact hours). TARA Akshar+ provides an additional literacy in functional arithmetic in just 19 days over

38 contact hours. The programme uses new technologies for learning, including advanced memory techniques. It is delivered through trained instructors using special playing cards and writing books.

Development Alternatives conducts training of instructors and works through partnership with civil society organisations to deliver the programme. It is recognised by the Ministry of Human Resources, Government of India as an innovative and path-breaking adult literacy programme.

The TARA 'Literacy to Livelihood Programme' builds on TARA Akshar+ to prepare neo-literate women for self-employment and jobs, thus empowering them with both literacy and income generation opportunities.

TARAhaat continues to innovate new literacy and continuing education products and bring information and knowledge to the fingertips of rural and peri-urban populations.





DESI Power

Decentralised Energy Systems (India) Pvt. Ltd., more commonly known as DESI Power, is an independent rural power producer involved in and committed to socio-economic development of villages through provision of renewable energy services for domestic and economic applications. Its mission is to reduce endemic rural poverty through local job creation and assured income generation. It was jointly promoted by DASAG Energy Engineering Ltd., Switzerland and Development Alternatives, New Delhi and was registered as a private limited company under the companies act and was established in 1996.

DESI Power was established to develop, package, promote, build and operate renewable energy based Independent Rural Power Plants (IRPPs). Initially, it was essential to establish the reliability and local management of renewable energy technologies for power plant applications.

DESI Power built nine pilot and demonstration plants to establish the model in its totality. It is now committed to build EmPower Partnership projects in 100 villages (four villages are already working) to establish and demonstrate their viability for socially responsible investment on a big scale by the private sector. Such a decentralised integrated model can accelerate the socio-economic development of villages in an economically, socially and environmentally sustainable manner.

DESI Power has been a partner of the Rockefeller Foundation to establish the concept of a program called SPEED (Smart Power for Environment-friendly Economic Development) and is actively involved in its implementation. It is building 20 power plants under this program in Bihar, India. In addition, DESI Power provides technical, management and training inputs for SPEED plants being built at other locations by other promoters.





DA World Headquarters - The Knowledge Resource Centre

The Development Alternatives World Headquarters, located in New Delhi, is one of the first buildings in India that aims at zero emissions. The building is best described as a living ecosystem - a fine balance of natural and man-made processes employing environment-friendly energy, material and water management methods. It is a living testimony to the vision, mission and commitment of Development Alternatives to creating a national future that is based on social justice and a cleaner environment.

The Development Alternatives World Headquarters exemplifies the social and environmental values that the organisation promotes and seeks to fulfil the expectations of its partners, customers, peers and indeed the society at large by demonstrating responsibility towards use of scarce natural resources, promotion of sustainable livelihoods and local rural and peri-urban economies and promotion of an inclusive approach in design. It conforms to the highest standards of environmental and resource conservation, safety and security of personnel and total compliance and transparency in processing statutory approvals.

The construction systems used in the new DA World Headquarters are an inventory of innovative and green building materials and techniques that

are easy to replicate in both urban and rural areas. A wide range of resource conserving strategies that include user defined norms and standards for thermal comfort, ventilation, lighting, waste management and water use and conservation measures that harvest, reduce, reuse, recycle and recharge the scarcest resources - energy and water are used in the building.

Development Alternatives believes its newly reconstructed Headquarters building will set a standard for responsible construction practices' in India that will rely on the use of alternative, eco-friendly and cost effective methods, technologies and solutions. Development Alternatives is pleased to offer the innovative methods and technologies that it has employed in the new Development Alternatives World Headquarters to all who might wish to take advantage of them - corporations, manufacturers of building, products, architects and interior designers.

The DA World Headquarters is rapidly gaining a reputation as a centre for formal and informal discussions on germane issues of sustainability. A world class knowledge resource centre is being built to attract researchers and academicians to use its facilities and further the thinking on sustainable development.





Bundelkhand - *Our Karmabhoomi*

In pursuit of its mission to create sustainable livelihoods, Development Alternatives focuses on Bundelkhand in Central India. The region comprises 13 districts of the States of Uttar Pradesh and Madhya Pradesh. Bundelkhand is a microcosm of the Indian rural economy, one of the poorest and most backward regions in the country.

Agriculture in this region is vastly rain-dependent, diverse, complex, under-invested, risky and vulnerable. In addition, extreme weather conditions, like droughts, short-term rain and flooding in fields add to the uncertainties and seasonal migrations. Scarcity of water in the semi-arid region with poor soil and low productivity further aggravates the problem of food security. More than one third of the households are considered to be Below the Poverty Line. Lack of employment opportunities, insecurity of livelihoods and lack of supportive governance have led to large scale migration. The literacy rate is very low, with female illiteracy being way below the national average.

Development Alternatives makes it a high priority to change this around. It has set up three resource centres in Orchha, Datia and Pahuj, on a unique concept called TARAGram. These are livelihood resource centers

demonstrating models of sustainable development. TARAGrams are as much a destination for practitioners in their quest for new learning as for local village communities whom these centers seek to serve.

The main focus of work here has been on regeneration of natural resources through modern scientific practices and local knowledge and strengthening community institutions.

The Natural Resources Management (NRM) programme in Bundelkhand has contributed to the regeneration of over 25,000 hectares of land and interventions have directly contributed to an enhancement of 15 to 20% in the incomes of more than 10,000 farmers in the region. Women, farmers and artisan groups have been organised as collectives and community based enterprise models developed for them. Work with village governance system is leading to improving access of families to public programmes, schemes and funds for housing, water supply, sanitation and village infrastructure.

Today, DA works directly in over a 250 villages in three districts and reaches out to various civil society and self help groups in the remaining 10 districts of Bundelkhand.





Outreach

The primary objectives of the DA Group's outreach strategy are to influence thoughts, policies and behaviours towards a development in sync with human well-being and planetary health. In doing so, the DA Group aims to build an ALTERNATE paradigm for development.

Our **websites** (www.devalit.org) provide a rich and dynamic repository of knowledge and solutions developed by the Group. Our monthly **newsletter** reaches out to more than 5000 people and is available as both an online and paper version.

A network of **Civil Society Partners** working at the grassroots, policy research and advocacy spaces rich in knowledge and experiences are our peer group. We connect with them through **knowledge events** and **exchange programmes**; building mutual capacities and advocating good practice and sound policy development. Our civil society and enterprise partners also strengthen and enlarge our connect with the rural and urban bottom of pyramid customers.

Communication and outreach through the **community radio** and other **rural media** forms an important part of our engagement strategy with rural

communities and local governments. **Rural immersion** and **school awareness** programmes designed for urban youth enable the Group to connect with this dynamic constituency of future leaders of India.

Multi-stakeholder networks, knowledge platforms and knowledge events at sub-national, national, regional and global levels help form a shared understanding and policy perspectives on varied facets of sustainable development. The DA Group is part of many prominent development networks such as the Independent Research Forum for a Global Sustainable Development Agenda, Green Economy Coalition, Climate Action Network South Asia, Building and Advisory Services and Information Network- South Asia, Global Water Partnership, Community Radio Forum of India, and Bundelkhand Knowledge Platform.

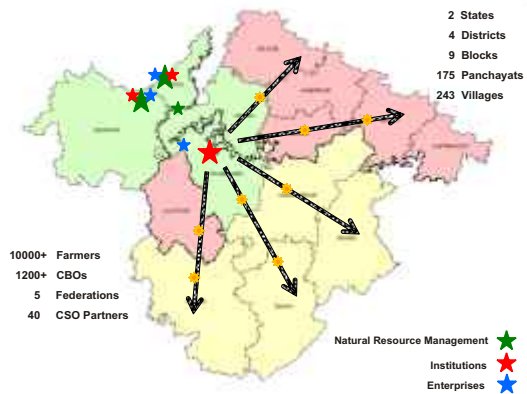
Our annual event, the **TARAGram Yatra** brings together global minds to deliberate on germane issues of development with the mission of inspiring sustainability in policy and practice. With a mix of dialogue and field visits, the **Yatra** provides a platform for exchanging cutting edge ideas on how to realize a sustainable future. The event provides leads for follow-up on policies and action at the global, national and local levels.



Research and Action Footprint

Local

Bundelkhand



National

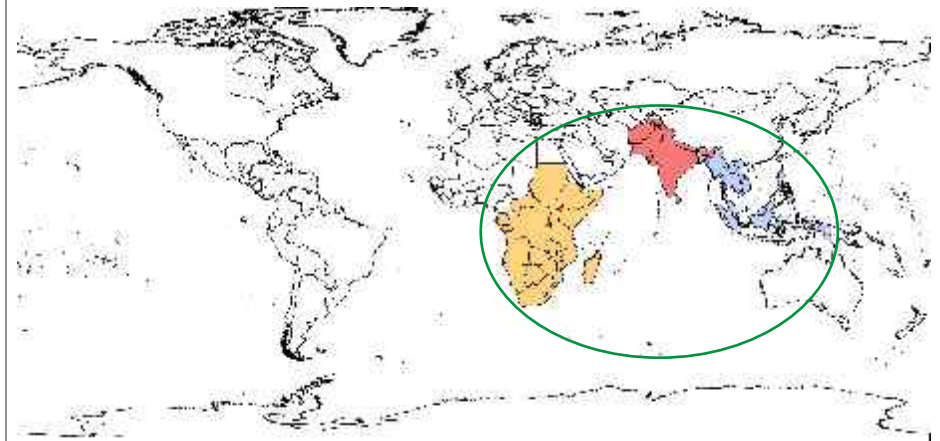
India



Knowledge Transfer and Global Influence Footprint

Global

Asia Pacific and Africa



Footprint

The Development Alternatives Group works at local national and global levels. Its partners and clients include village communities and civil society organisations, local and state governments, agencies and ministries of the Government in India, multilateral agencies and private sector institutions across India, south and south-east Asia and Africa.

With the Bundelkhand region at the heart of India as its primary focus, the DA Group's areas of operation spread to the nine states of the Hindi belt of India, wherein lie the 100 poorest districts. The DA group works directly in 250 villages in Central India and it has partners and associates across the Hindi belt. TARA and the Group's business affiliates work across the country through business associates, channel partners and entrepreneurs reaching sustainable technology goods and services to communities, government and non-government agencies and private sector.

TARA and its business affiliates, TARA machines, TARAlife, TARA Nirman Kendra and TARA Livelihoods Academy provide training and technology transfer services to institutions and entrepreneurs across India and in other developing countries.

In Bundelkhand, Development Alternatives works with a consortium of civil society organisations the Bundelkhand Knowledge Platform (BKP) to share lessons and build capacities for creating sustainable livelihoods in the region at scale. A network of youth organisations and schools as part of the CLEAN-India network led by Development Alternatives spreads the message of urban environmental improvement and sustainable consumption across India's towns and cities. A network of Civil Society Organisations across the 100 poorest districts of India nurtured through the Poorest Areas Civil Society programme helped the DA group to reach more than 6.5 million people in a span of seven years.

The DA Group reaches out to the Global community through partnerships and networks such as the Climate Action Network South Asia (CANSA), Building Advisory Services and Information Network (**basin-South Asia**), the Green Economy Coalition (GEC) and the Independent Research Forum (IRF). It develops global strategies in response to problems of widespread poverty, environmental degradation and climate change. It advocates for sustainable development approaches and has influenced global discourse on the subject through its presence in the international processes such as the Rio Conference in 1992 and Rio+20 in 2012.





Impact

The Development Alternatives Group works with policy makers, corporate sector and civil society organisations to influence practice and policy so that the agenda for sustainable livelihoods and sustainable development reaches scale. The impact of this work is seen both at the micro-level in the lives of the poor, as well as in the change in programmes and policies of public and private sector agencies. Thus the organisation, in association with its affiliates and partners, is able to influence improvements in social, economic and environmental indicators at scale.

The DA Group has organised its work around six thematic programmes to track their interdependent outcomes with respect to savings in energy and finite resources, reduction in carbon footprint of economic actions, regeneration and conservation of natural resources, community empowerment to access basic needs and entitlements, job creation, economic growth of target population and creation of physical assets that lead to improvement in the quality of life of the poor.

Cumulatively, the organisation has enabled over 80,000 illiterate women to read and write, linked 25,000 women with financial services, 30% of whom, have availed credit services and has supported more than 14,000 families to access public programmes through information and capacity supports.

Partners of the Bundelkhand Knowledge Platform have benefitted from DA's work to replicate it in the 13 districts of the region. The sharing of DA's work in the South Asian region through the basin CAN-SA platforms has benefitted practitioners across the region.

The organisation has enabled over 500,000 families to access eco-habitat, safe water and clean energy solutions, leveraging over rupees one billion in public and private spending towards this end.

The outcomes of Clean Technology programme are now becoming evident in the form of measurable savings in virgin resources, fossil energy and reduced pollution from manufacturing. Technologies promoted by the DA group have the potential to utilize industrial wastes and their transfer to other developing countries in South Asia and other countries in Africa and South-East Asia are an indication of the benefits these may provide.

The Natural Resources Management programme has contributed to the regeneration of over 25,000 hectares of land and interventions have directly contributed to an enhancement of 15 to 20% in the incomes of more than 10,000 farmers in Bundelkhand. Lessons from the programme have been integrated into the state climate action plans, programmes for integrated watershed management and the Mahatma Gandhi National Rural Employment Guarantee Scheme in Madhya Pradesh.





Recognition

Development Alternatives and its members have won several top awards for its work on rural development and the environment, including the *Global 500 Award of the United Nations 1992*, the *Stockholm Challenge Award 2001*, the *United Nations Sasakawa Environment Prize 2002*, the *Schwab Foundation Award for Outstanding Social Enterprise 2005*, the *WWF's Duke of Edinburgh Medal 2011* and *The 6th Narain Dutt Award for the Conservation of Nature 2013*.

In 2012 Development Alternatives was ranked among the *Top 100 Think Tanks in the World*. It won top standing in 8 major categories according to the Global Go To Think Tanks Rankings report issued by the University of Pennsylvania's International Relations Program.

The DA World Headquarters, Green Building won the *NDTV-Toyota Green Award 2010* in the Green Design category. The award was given away by the President of India.

In 2011-2012, the Fly Ash Technology package was nominated for the second round of *St. Andrews Prize* as one option among 30 shortlisted from a total of 200 applications.

The Dindigul project of DA's CLEAN INDIA programme won a 2nd runner-up position in the 2011-JCB, *Confederation of Indian Industry, APTDC Award for Excellence* in Waste Management, 2011 for its community initiative involving students in setting up an entrepreneurial waste management system.

Radio Bundelkhand, the community radio managed by Development Alternatives received a special mention in the 2011 *Manthan Awards* for enabling informed dialogue and rural empowerment. The Radio also won the *Commonwealth Educational Media Centre for Asia Award* for promoting the local culture of Bundelkhand through its programmes. Development Alternatives' 'Rural Reality Show' won the World Bank's 'Global Development Marketplace 2009' Award in the Most Innovative Idea in Climate Change Adaptation category.

TARA MACHINES of Development Alternatives Group received *THE CHANGING MARKETS AWARD- Recognising Champions from Green and Inclusive Markets 2013* from 130 global, green and inclusive businesses.



Facilities



Centers of Excellence: The DA Group Headquarters building houses the Center for Sustainable Futures, the Center of Excellence for Sustainable Housing and Rural Infrastructure, A Climate Change Center and a Center for Integrated Water Resources Management. These centers are engaged in cutting edge research on issues of global and national sustainable development, access of communities to basic needs goods and services and natural resources management. The Centers of Excellence are supported by technical and social laboratories.



- **The Product Development Center.** The Product Development Center is the heart of technology and product research and development. It consists of a mechanical design studio and two product development workshops in New Delhi and Orchha equipped with state of art mechanical engineering equipment. A fully equipped laboratory for pulp, paper, tetra-pack and bio-mass waste treatment is also available. The Center provides design, development and prototype development support to the business affiliates of the DA group and to external clients.
- **Building Materials Laboratories.** Two laboratories in Delhi and Datia are equipped with a Material Research Facilities to undertake testing and analyses of soils, clay and non- clay-based bricks and building materials.
- **TARA Environment Monitoring Facility.** Established in 1990 in New Delhi, the environment monitoring facility provides core research and technical support for design and development of environment improvement products and technologies. It has the capability for monitoring and analysis of drinking water, stack and ambient air, energy and emissions, waste water treatment for domestic and industrial applications and soil quality and fertility for agricultural purposes.

Facilities

TARAgam, is a unique concept; a livelihood resource center and a social laboratory demonstrating models of sustainable development, with facilities for training and conferencing. It is as much a destination for practitioners in their quest for new learning as it is for the local village community whom it seeks to serve. Three such TARAgams have now been established.

- **TARAgam Orchha** located on the banks of Barberi stream, is a Sustainable Livelihood Resource Centre close to the beautiful and historic town of Orchha. It was set up in 1995 as a technology village by Development Alternatives. It has, over the years, demonstrated the economic viability of sustainable production systems through an industrial estate for mini-enterprises, providing jobs for local people and generating goods and services for local markets.
- **TARAgam Pahuj** is a Sustainable Livelihood Centre, located near the Pahuj dam, in village Ambabai in Uttar Pradesh. The centre focuses on natural resource management and sustainable agricultural practices. It demonstrates rainwater harvesting, soil and moisture management practices, land reclamation and development especially using green organic manure.
- **TARAgam Datia** located strategically on the north-south highway corridor demonstrates different models of energy conservation and green technology. TARAgam Datia undertakes extensive research and demonstration related to the manufacture of energy efficient bricks. It houses a women's entrepreneurship centre and provides facilities for training. A running model of the Eco-Brick Kiln that provides clean solutions for building construction and climate change mitigation, a materials laboratory and biomass gassifier that provides green power to the operations are located on campus.



Facilities



The Bodh: Conferencing Facility at the DA Headquarters Building: The conferencing and training facilities of Development Alternatives at the Headquarters in New Delhi are a hub for intellectual and cultural exchange on issues of sustainable development. An indoor discussion space for 80-100 participants, three smaller break-out rooms for 8-12 participants each and an amphitheater for approximately 200 persons are available for the DA Group, and like-minded institutions. Regular features at the Bodh include quarterly discussions on Sustainable Development – Trialogue-2047 and a Thursday Movie Club.



Farmers' Training Center Pahuj. Located in the TARAGram Pahuj campus, the center demonstrates models of water conservation, harvesting and land use planning and promotes sustainable water management and agriculture practices. Its activities are aimed to generate awareness and build capacities of the local farming community.

Radio Bundelkhand. Dedicated to the interests of the local rural communities, this community radio is managed in association with the communities living in the region of Tikamgarh and Jhansi districts in the Bundelkhand region of Central India. Radio Bundelkhand is located at TARAGram Orchha in Madhya Pradesh. Community radio services are broadcast daily from 8:00 AM to 8:00 PM catering to the needs and aspirations of the local community. Radio Bundelkhand also offers training services to other community radios in content development and radio reporting.

Facilities

Bundelkhand Conferencing and Training Centers. The conferencing and training facilities of Development Alternatives at the Orchha and Pahuj Campuses in Bundelkhand, central India offer world-class ambience for meetings and workshops on issues of current interest, particularly sustainable global development. Situated in a rural Indian environment, the location offers a quiet and conducive atmosphere for creative thinking and discussions.

The campuses directly demonstrate ecological living, sustainable livelihoods and resource efficiency in all their aspects. The buildings use local materials and indigenous technology for construction. Water is harvested through a check-dam and the campuses are electrified using renewable bio-mass energy sourced locally.

The main conference center comprises a discussion space for up to 80 participants, 4 smaller meeting rooms for 8-10 participants each, a training hall for upto 25 participants and numerous semi-open breakout spaces for use as interactive meeting forums.





The Founder

Dr. Ashok Khosla is the Chairman and Founder of the Development Alternatives Group.

After many years of working with a wide variety of institutions in India and abroad, he set up Development Alternatives (DA) as a major step towards fulfilling his dream for a vibrant and prosperous India. Over the years, Dr. Khosla has worked to progress the theory and demonstrate the practice of sustainable development in all its aspects.

Concurrently, he has been President of the International Union for Conservation of Nature (IUCN), 2008-12, Vice President and President of the Club of Rome, 2000-12; and Co-chair of UNEP's International Resource Panel, since 2008.

In India, he has served on the National Security Advisory Board, the National Environment Board and the Science Advisory Council to the Cabinet and on the boards of many non-government organisations and academic bodies.

At the international level, Dr. Ashok Khosla has held senior positions, such as Special Advisor to the Brundtland Commission (WCED), Chair of the '92 NGO Forum at the Earth Summit in Rio de Janeiro, and Special Advisor to the Secretary General of the Rio+20 Conference. He has served on the Boards of several environment and conservation organisations such as Centre for Our Common Future, Energy Globe, Stockholm Environment Institute, ZERI, EXPO 2000, Toyota Environmental Awards.

Globally, he has pioneered several initiatives, including assisting to design and teach the first university course on the environment (Harvard University, 1965); set up and headed the first governmental agency for the Environment in India (under Prime Minister Indira Gandhi, 1972); and established the first social enterprise for sustainable development (Development Alternatives, 1982).

He is an Officer of The Order of the British Empire (OBE), a Senior Ashoka Fellow and Patron of LEAD-India.





The Co-Founder

Dr. Christian de Laet (1927 – 2008), an environmental pioneer and grassroots activist, was the Co- Founder of the Development Alternatives Group. During his lifetime, he worked closely with Ashok Khosla in the birth and early years of formation of the Development Alternatives Group. The truly interdisciplinary and trans-cultural nature of the organisation was a result of the influence of Dr. Christain de Laet.

Christian had a profound capacity to look ahead with understanding as well as vision and an unusual ability to communicate with others. He had a deep understanding of the world's cultures and systemic inter-relationships of the human, natural and spiritual worlds and a solid scientific grounding. This gave him an uncanny ability to design out-of box approaches to many of the environmental challenges that face the world today, blending scientific thought and re-interpreting traditional knowledge systems and folk cultures.

Born in Belgium in 1927, he studied advanced mathematics at the Ecoles Speciales of the University of Louvain, in 1944, and engineering at the Polytechnical School of the University of Brussels in 1945.

Christian made Montreal, Canada, his home in 1949, where he first got a job as a young mathematician. He spent the better part of his life travelling across the world, from the Canadian prairies to Papua New Guinea, trying to understand the global environment and humans' place within it. The Indian experience was critical to his achieving a better and more profound understanding of the role of the individual 'self' in a globalised world. He was multi-lingual and spoke French, Flemish, German and English. During the course of his life, he has also learned Italian, Spanish, and Russian, as well as, eventually, Hindi.

In 1964, Christian de Laet was elected the first secretary-general of the Canadian Council of Resources and Environment Ministers (CCREM). In the years following the UN Stockholm Conference of 1972, Christian de Laet became a consultant to INGOs, as well as IGOs, and specialised UN agencies such as WHO, UNESCO, UNU, UNEP and UN/ESCAP. Christian de Laet was honoured, in 1990, on Parliament Hill on Canada's National Day, named as the Canadian Environment Achiever for both his national and international work.



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Healthy Lives



Productive Livelihoods



Resilient Eco-systems





The Development Alternatives Group

Development Alternatives (DA)

www.devalt.org, www.cleanindia.org

Technology and Action for Rural Advancement (TARA)

www.tara.in

TARAlife Sustainability Solutions Private Limited

TARA Machines and Tech Services Pvt. Ltd. (TMTS)

www.taramachines.com

TARAhaut Information and Marketing Services Ltd.

www.tarahaat.com, www.taraakshar.com

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