

Success Secrets of Deshpande Foundation's Farm Pond Model

by SN Team

For centuries India has been a nation woven intricately by millions of communities. Community systems have been resilient to most adversities including droughts.

After the largesse of the governments reached villages with subsidized food and guaranteed employment since 1970 or so, the community fabric seems to have weakened. Socialism replaced micro-collaborative entrepreneurship models. The community leaders shifted their interest to more lucrative government schemes rather than strengthening their self sufficiency systems. The result is heavy dependence on corrupt and weak government apparatus and near disappearance of community-led disaster resilient models.

It's become a routine with newspapers to write about a few communities that have managed to survive droughts well because



http://deshpandefoundationindia.org/farm_pond.php

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Confederation of Indian Industry
Knowledge Partner

Purpose: To excite Indian businesses, SMEs, executives and students about the immense business opportunity in not only adopting Sustainability as Strategy in their companies but also inspire them to the possibilities of a big market for innovative sustainability products and services.

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Deshpande Foundation. SRDS also implemented borewell recharged structures in Maharashtra with the help of Sri Satya Sai Trust.

For more details contact: srdindia.blogspot.com

of their community networks. They also write about new initiatives by enterprising locals to fight drought. But the overall scenario is one of desperation – even when successive governments claim to have spent thousands of crores of rupees on water management.

The reports that have drawn maximum attention in recent months are about the Farm Pond initiative of the Huballi-based Deshpande Foundation (DF) called Neer Sinchina. Started in 2013, the model requires smooth working of various elements for it to be meaningful.

In 2013, DF constructed 16 small ponds for free. By the end of 2014, with support from the Tata Trust, which donated four earth moving equipment, 100 ponds were carved out of the earth in 12 villages of drought-prone Navalgund taluk in north Karnataka. The number rose to over 200 by mid-2015. The team is processing more than 300 applications from farmers across the taluk. According to reports, DF has built 1751 ponds covering 6400 acres involving 1750 farmers in various parts of North Karnataka.

Modus Operandi

This is not a typical dig and scoot model that most government agencies or NGOs practice. DF has laid down a step-by-step approach – that has got fine-tuned over the last three years – which ensures facilitation and support right from the start and doesn't end.

DF's Farmer Pond Model

- Voluntary democratic approach to pond site selection
- New mindset – public irrigation to private irrigation
- Low cost investment – half the market rate
- Sees Deshpande Foundation as a facilitator, not a donor
- Integrated service – not simply a one-time engagement
- Low cost solution to de-risk farming
- Farmers have a sense of ownership as they pay for operating cost
- Post harvest sales support

The farm pond team attends Gram Sabhas where it introduces the concept to local Gram Panchayats. Then the village panchayat decides to send an application to the Foundation. Following the application, local self-help groups (SHGs) select deserving farmers in need and verify their land documents.

The team also offers training to farmers on the crops they can grow and shares best cultivation practices. It also offers farm-to-market services to ensure higher value realization.

The team's challenge was to convince farmers of the value of dedicating up to a quarter of an acre of their productive farmland to the construction of a farm pond while also financially contributing to it. In the cost-sharing model small farmers bear 80% of the cost with 20% assistance from DF. Farmers bear, in cash, the entire operational cost of the farm pond (including the labor cost, cost of the fuel of the excavator, and the fees of the operator) while DF provides technical assistance.

The market rate for excavating a 100x100x12 cubic foot pond is said to be between Rs. 80,000 to Rs. 90,000 but farmers under this scheme get to do it for Rs. 30,000 – Rs. 40,000. These ponds can hold up to 300m³ of water, enough to irrigate 3-4 acres of land up to four times a year. Once built, they need minimum maintenance and repair.

Small farmers who own between 2 and 5 acres are now willing to dedicate a quarter of an acre to water harvesting since it adds value to the remaining land, permitting multi-cropping, and acting as an insurance against monsoon failure, DF's CEO Naveen Jha told a paper recently.

The Deshpande Foundation Farm Pond Model is a good example of how a collaborative model involving philanthropy; social entrepreneurship; risk mitigation approach of small farmers, outcome ownership, market-linked farm cultivation have all come together nicely.

Economists believe that growth in agriculture is at least twice more effective in reducing poverty than any other sector in India. The Farm Pond initiative helps farmers not only fight drought but enhances their nutritional intake, puts extra income in their hands all round the year. It's a win-win for all.

The big question is – now that that proof of concept and pilot is done – who will take it across India so that the impact of drought is minimized and farmers start taking pride in farming again.

Is Sugarcane the Scapegoat or the Culprit

Indians are good at finding a scapegoat for all their problems. Sugarcane seems to be the latest for severe drought in Maharashtra and northern Karnataka. Here are two scenarios – one that blames the sugar barons for drought and the other arguing that it's the irrigation practices, not sugarcane to blame. Both blame it on rank disdain and criminal manipulation by politicians of Maharashtra for the last many decades. Will they at least relent now?

by SN Team

Last year, Maharashtra's average rainfall was around 1,300 mm, which was more than the national average of 1,100 mm. Some areas, like the Konkan region, received more than 3,000 mm of rainfall. Marathwada received 882 mm, while Vidarbha had 1,034 mm of rain. Thousands of crores of rupees have been spent on irrigation and building dams in Maharashtra, but critical measures for water conservation, drip irrigation or rejuvenating ground water are rarely done. It's clear that sugar barons in Maharashtra don't believe in these practices as long as water and power are nearly free and hence earn the right to misuse them.

Experts warn that if corrective steps are not taken quickly, in the next two decades, the Marathwada region will become Maharashtra's first desert

Despite drought like conditions in the state in the last few years there have been an increase in the number of sugar cooperatives. Maharashtra has over 205 sugar cooperatives and 80 privately owned sugar mills. A recent *Indian Express* report observes that: "Though, strictly speaking, these mills are private, in many cases, their promoters chair cooperative mills as well. In fact, it is a popular pastime of politicians in Maharashtra to make state-funded sugar cooperatives sick, and then convert them into private ones. Water misuse is just collateral damage."

It's ironic that rain deficient Maharashtra produces second largest sugarcane in India after Uttar Pradesh where River Ganga and many of its tributaries flow. Official records show how just about 4% of agriculture land is under sugarcane but uses up as much as 71.5% of irrigated water, including that from wells. "This is not a revelation. The state always knew this. But it never thought of putting a stop to the mushrooming of sugar mills because they are either owned or controlled by the state's politicians. Any politician worth his name in Maharashtra has to have at least one sugar mill to support his or her political empire. The rule applies to all parties across all regions, including the most drought-prone, Marathwada," the report observes. 20 new sugar factories came up in the last 3 years even while villages were in distress.

Counter-point

Sugarcane requires 2,100-2,200 mm of water, more than the 1,400 mm or so for paddy, 900 mm for cotton,



Dying field of sugarcane in the south-eastern district of Sholapur.

Bitter Sweet

- **Sugar barons responsible for drought in Maharashtra**
- **Sugarcane uses 70% of irrigated water with only 2% cropped area**
- **Maharashtra is second in sugarcane cultivation even when it does not have large rivers like UP to support**
- **Sugarcane is an energy, fodder, biomass crop with sugar as a byproduct**
- **It's a 365 days crop with least water use per day**
- **Only drip irrigation is the answer**
- **Make flood irrigation of sugarcane and paddy a criminal offence**

600 mm for jowar (sorghum) and arhar (pigeon-pea), 550 mm for wheat, and under 500 mm for soyabean and chana (chickpea). But then, sugarcane grows over 365 days, as against the 180 days of cotton and arhar, 130 days of paddy and wheat, 110 days of jowar and chana, and 100 days of soyabean. Besides, even the best Punjab farmer can harvest only six tonnes of wheat and nine tonnes of paddy per hectare, whereas cane yields rarely go below 40 tonnes, while averaging 80 tonnes in Maharashtra. So the argument is sugarcane consumes less water on a per-day basis, and even less for every unit weight of biomass produced.

Sugarcane farmer doesn't merely grow cane stalks. For every 80 tonnes of cane produced from a hectare, an additional 15-16 tonnes of green 'tops' also get harvested. These green top leaves — roughly 20% over and above the millable cane weight — meet much of the fodder needs of his buffaloes and cattle during the crushing season from November to April. The water being used for cultivating sugarcane, thus, also goes towards production of fodder, which the farmer would otherwise have had to grow separately.

Sugarcane bashers say it takes 2,000-odd litres of water to produce one kg of sugar. But they won't say that this water is consumed over 12 months, or that it goes towards production of fodder, electricity and alcohol as well. And if one were to also add that the mills themselves consume no additional water or electricity — they are surplus in both — it would virtually mean sugarcane's water use should be seen differently.

Another incisive report in the Indian Express recently notes that sugar accumulation in the cane takes place only in last 90-100 days of ripening and maturation. The crop's 365-day duration also covers germination (40-45 days), tillering (springing of stems from the parent shoot: 90-100 days) and grand growth (development of millable canes from tillers: 110-120 days). Much of the water consumption happens in the tillering and grand growth phases that precede sucrose accumulation. "This only reinforces the fact that this is primarily a biomass-cum-energy crop, with sugar only one of its constituents," the report noted.

Should Marathwada which receives an average annual rainfall of slightly over 820 mm, should grow cane at all? It's a fact that sugarcane cultivation is about 2 lakh hectares compared to 70 lakh hectares of cropped area. So the pro sugarcane lobby says drought is because of failure of monsoon in the last three years.

Whether the pro or anti sugarcane lobby is right or wrong is less important. This year's drought should result in compulsory drip irrigation of all crops — supposed to yield one third more — and make flooding the fields with irrigated water a criminal offence. "With drip irrigation and judicious use of canal water, it should be possible for even Marathwada's farmers to realize the enormous food, energy, and fodder potential offered by a most versatile crop."

Unlike the droughts a decade ago, Sunita Narain, Director of Centre for Science & Environment, says this year's drought is manmade — gross mismanagement of water resources and criminal negligence of conservation. She says, it also raises hope that if we put our heads together, we can manage it better in the future.



For instance China committed to grow renewables to 20% of its energy mix in 15 years. To put that in perspective, 20% of China's energy is equivalent to the entire US energy sector. India

We Mean Business, a coalition of 374 companies with a combined \$7.8 trillion in revenue and 183 investors who collectively manage \$20.7 trillion in assets, said it chose the Earth Day to release its report about the economic opportunity to support the governments' committing to action.

The coalition said that member companies that have invested in clean energy and low carbon initiatives are seeing an average 27% return on those investments. They are also experiencing “first mover advantages in low-carbon markets, more resilient operations and supply chains and a stronger reputation among employees, consumers and other stakeholders.”

GreenBiz quoted Howard saying that “while action to address climate change used to be described as “a burden and cost to be shared,” now it is being described as a huge opportunity for innovation, investment and job growth.” It also quoted a US Dept of Energy report which stated “New investment in renewable energy generation in 2015 exceeded, for the first time, new investment in fossil-fuel generation.”



Plant Trees Sensibly

The Lok Sabha Compensatory Afforestation Fund bill, 2015, which will enable India to spend Rs. 40,000 crore (Rs. 6,000 crore a year) on afforestation was passed early May 2016. This is good news and comes at a time when India has committed a carbon sink of 2.5 billion in its Intended Nationally Determined Contribution, submitted to the UN body on climate change as part of the Paris Agreement.



As with most government spending, the challenge is to ensure the following:

- a. That the administration cost does not exceed, say 5%
- b. Sets up an independent monitoring and reporting agency with power over states as well
- c. 50% is spend on reclaiming lost forests where native plants are replanted even if they take longer
- d. Plant drought resistant trees in arid lands so that they can provide fodder and shade during summer
- e. Focus on reclaiming and strengthening green cover around rivers and lakes
- f. Add a revenue element to this body so that the cost can be recovered over a period of time
- g. Focus on community driven and managed afforestation program where the success rate is much higher than government monitored effort

IIMB Launches Incubator for Non-profits

The Indian Institute of Management Bangalore's NSRCEL is launching a first-of-its-kind startup incubator exclusively to nurture early-stage non-profit organisations working primarily in education, financial inclusion, and jobs and livelihoods for the urban poor in September, 2016.

The incubator will be supported by the Michael and Susan Dell Foundation. The foundation will provide Rs 4.2 crore as a three-year grant.

IIM-B has been running one of India's leading startup incubators via NSRCEL, where it has already incubated about 80 startups. Now it has decided to engage more actively in supporting social entrepreneurship as a matter of strategic priority. Since 2006, the foundation has invested in 24 for-profit social enterprises including Janalakshmi and Ujjivan in financial inclusion; LabourNet and iMerit in job-oriented skills market; and Edutel and Avanti in education.



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ibis Navi Mumbai is the first hotel in India to be awarded “Gold” under IGBC Green Existing Building Operations & Maintenance Rating System. It scored all twelve possible points in the Innovation Category

AccorHotels Survey Finds Youth & Women Guests More Eco-Savvy

AccorHotels, the world’s largest hotel operator with close to 4,000 hotels, 190,000 staff spread in 90 countries, has found that the youth and women guests are more environment friendly than the oldies. It was surprised to note that budget hotel guests are as likely as upscale and luxury guests to accept higher prices for a more eco-responsible hotel

These are the top two findings of its December 2015 survey announced in April 2016. This survey, involving 7,000 guests in seven countries, was aimed at measuring changes in guests’ behavior and current awareness of sustainable development. It said its almost 50-year commitment to being a socially responsible company is beginning to pay its dividends. It has set an ambitious Planet 21 program leading up to 2020.

Highlights

- Guests are aware of the need for sustainable action on a daily basis
- 80% of guests say that they avoid wasting food at home and that they sort their waste
- Women and the young feel more involved in sustainable development than men, and young guests feel more involved than their elders
- Guests are ready to continue the eco-responsible actions that are part of their daily lives when they are at the hotel
- Today, ‘eco-responsible hotel’ tag is a distinctive, but not yet a decisive factor - 36% of Indonesian guests say that they always take sustainable development into account when choosing a hotel room, compared to an average of 13% across the world
- Location and comfort are still the primary selection choice. Less than 10% of guests are entirely ready to accept an inferior location or reduced comfort to stay in a hotel that has implemented eco-responsible measures.
- Two of three guests said they are ready to pay slightly higher rates if the hotel undertakes eco-responsible actions, such as offering organic or green products, or if the hotel has received low waste or low carbon emissions labels.
- More than half of guests are in favor of reusing their towels, especially if some of the money saved in doing so is reinvested in planting trees for the benefit of the local community.
- Only 6% of guests are not interested in healthy food. Guests are especially interested in locally sourced, organic, and seasonal produce.

- More than one in three guests is interested in fair trade produce and produce harvested from the hotel garden.
- Younger guests are more likely than older guests to choose a restaurant based solely on the fact that it grows its own vegetables: 20% of guests under 29, compared to only 10% of guests over 60.
- This barometer study has shown that local responsibility is central to guests' perception of hotels' commitment to sustainable development

The group's plans by 2020 include:

- **30% less food waste**
- **100% low-carbon new buildings and renovations for its owned and leased properties**
- **1,000 urban vegetable gardens in its hotels**

See full survey - http://www.accorhotels-group.com/fileadmin/user_upload/Contenus_Accor/Developpement_Durable/pdf/EN/guest_study_en_2016.pdf

Reuse Towel, Help Plant a Tree

The "Plant for the Planet" program, launched in 2009, aims to incentivize guests who stay more than one night in a hotel, to reuse their towels. In return, AccorHotels makes a commitment to plant a tree for them. It has so far planted 4.5 million trees in 25 countries.

Its other novel scheme is 'Soap for Hope', where used soap from hotels is recycled and distributed to low income communities.

Accor's Efficiency Good in India



Arnaud Herrmann

The AccorHotel chain runs 30 hotels across India. Its star property is Ibis in Mumbai which has earned a gold rating for its eco-friendly operations.

In a chat with *SustainabilityNext* from Singapore, **Arnaud Herrmann, vice president of sustainable development, AccorHotels**, says India has issues with water and energy efficiency. Yet AccorHotels have been able to become water efficient by 22% and energy efficient by 12% - which are equivalent to its global performance. Unlike other business sectors which have clear rating which help clients' choice, Herrmann says the hotel sector too needs clear 'label' mechanism. Until then it is difficult for hotels to command a premium for their eco-friendly measures.

One of the major challenges for AccorHotels is its large size and hence its ability to implement its sustainability goals becomes that much harder. Herrmann says, although it has been tough but they do have a strong mechanism to engage, and enforce if needed, the common goals among its diverse franchises. One third of 4000 properties are franchises and many are on management contracts.

About the overall hospitality sector, he says that this sector is still a laggard but in the next five years or so it will catch up with the best in the industry in social responsibility.

Since AccorHotels started the process of turning its hotels green much earlier and are local community friendly, they have a head start. "We started 20 years ago, and for ten years we were the leaders, while everyone else is catching up now," Arnaud Herrmann says proudly.

Herrmann moved to AccorHotels from Ernst & Young in 2013 to take on the role of the sustainability champion.

Apple is Green. Almost

Apple's 2016 Environmental Responsibility Report, covering fiscal year 2015, is its ninth annual update, highlighting the progress it has made and the places it is working hard to improve.

Apple says focus and simplify is one of its mantras. So, after deep reflection, data analysis, and conversations with stakeholders, it has set three priorities:

- Reduce our impact on climate change by using renewable energy sources and driving energy efficiency in our products and facilities.
- Conserve precious resources so we all can thrive.
- Pioneer the use of safer materials in our products and processes.

This report details how Apple is approaching each of these priorities, and highlights some key accomplishments to date.

As of January 2016, Apple said it is sourcing or generating enough renewable energy to cover 93% of the electricity it uses at its facilities worldwide. In fact, Apple is now 100% renewable in 23 countries, including China, Germany, Singapore, and the United States. It is also 100% renewable at every one of its data centers.

So whenever someone sends an iMessage, download a song from iTunes, or ask Siri a question, the energy Apple uses doesn't contribute to climate change.

In the past five years, it has reduced the carbon footprint in facilities by 64% because of clean energy use, avoiding over 1 million metric tons of carbon emissions. Apple said "It is working hard to reach 100% renewable energy for all of our facilities worldwide, and help our suppliers in China and everywhere around the world make the same transition to clean energy as we have."

- Powered **93% of its facilities worldwide with renewables** in 2015; sourced **100%** of its electricity from renewables in **23 countries**.
- Issued **\$1.5 billion in green bonds** to finance its **clean energy, energy efficiency**, and **resource conservation projects** in 2016.
- Reduced **carbon emissions from its facilities** by **64%** since FY11.
- Diverted **more than 89 million pounds of e-waste** from landfills in 2015.
- **Avoided 335,000 metric tons of CO₂-equivalent emissions** from entering the atmosphere in FY15.

https://ssl.apple.com/environment/pdf/Apple_Environmental_Responsibility_Report_2016.pdf



www.treehugger.com

Ingersoll Rand to reduce carbon footprint by 50 million mt by 2030

Ingersoll Rand, a world leader in creating comfortable, sustainable and efficient environments, announced key milestones towards its climate commitment to the Clinton Global Initiative.

To date, the company's climate commitment has supported the avoidance of approximately 2 million metric tons of CO₂ globally, which is equivalent to annual CO₂ emissions from nearly 300,000 homes annual electricity use and more than 2.3 billion pounds of coal burned. By 2030, the company expects to reduce its carbon footprint by 50 million metric tons.

Some of the 2015 advancements include the launch of the Ingersoll Rand EcoWise™ portfolio that endorses company products that use low global warming potential refrigerant and have a high efficiency operation.



<https://www.linkedin.com/company/ingersoll-rand-india>

To create a sustainable future, Ingersoll Rand announced a profound climate commitment in September 2014 to increase energy efficiency and reduce the environmental impact from the company's operations and product portfolio by 2030. The Ingersoll Rand Climate Commitment pledged to:

- Cut the refrigerant GHG footprint of its products by 50% by 2020 and incorporate lower global warming potential (GWP) alternatives across its portfolio by 2030;
- Invest \$500 million in product-related research and development over the next five years to fund the long-term reduction of GHG emissions;
- and Reduce company operations-related GHG emissions by 35% by 2020.

The company has launched a web-based tool alongside sustainability expert thinkstep which collects product-related GHG emissions data to help Ingersoll Rand quantify and report progress against the commitment.

MSCI ESG Research Launches New Index for Institutional Investors

The New Index and Metrics was designed to allow institutional investors to measure their exposure to public companies whose products and services help address major social and environmental challenges. This new framework aligns with the UN's sustainable goals adopted last September.



Linda-Eling Lee, Managing Director and Global Head of ESG Research, said, “This framework was developed following a client consultation with more than 25 of the world’s leading asset owners and managers, who agreed that there is room for new impact-oriented thematic investment approaches in public equity markets.

“To date, impact investing has largely been limited to small-scale, private equity strategies but there has not been a tool aiming to measure the extent to which exchange listed companies are involved in solutions for a more sustainable society and environment. The SDGs gave us the opportunity to offer tools to provide insight into what we define as Sustainable Impact”

The SDGs aim to end poverty, protect the planet and ensure prosperity worldwide via a series of targets to be achieved by 2030. MSCI ESG Sustainable Impact Metrics groups the 17 SDGs into five actionable themes: basic needs, empowerment, climate change, natural capital and governance. The MSCI ACWI Sustainable Impact Index is designed to identify companies that have at least 50% of their revenues tied to products and services that address environmental and social challenges through the five themes, while achieving minimum environmental,

social and governance standards through their operations.

For more than 40 years, MSCI’s research-based indexes and analytics have helped the world’s leading investors build and manage better portfolios. “Clients rely on our offerings for deeper insights into the drivers of performance and risk in their portfolios, broad asset class coverage and innovative research,” a press note stated. Its line of products and services includes indexes, analytical models, data, real estate benchmarks and ESG research.

MSCI serves 97 of the top 100 largest asset managers, based upon P&I data as of December 2014 and MSCI client data as of June 2015.

<http://www.businesswire.com/news/home/20160412005393/en/MSCI-ESG-Research-Develops-Framework-Support-Alignment>



SunEdison Files for Bankruptcy

SunEdison Inc, once the fastest-growing American renewable energy company, filed for Chapter 11 bankruptcy protection on 22 April 2016 after a short-lived but aggressive binge of debt-fueled acquisitions proved unsustainable, Reuters reports.

The company said it had assets of \$20.7 billion and liabilities of \$16.1 billion as of Sept. 30. SunEdison's two publicly traded subsidiaries, TerraForm Power Inc and TerraForm Global Inc are not part of the bankruptcy. In a statement, the companies, known as yieldcos, said they had sufficient liquidity to operate and that their assets are not available to satisfy the claims of SunEdison creditors. The bankruptcy "will present challenges," however, including with financing agreements for certain projects, the yieldcos said.

"Our decision to initiate a court-supervised restructuring was a difficult but important step to address our immediate liquidity issues," said Ahmad Chatila, SunEdison chief executive officer.

He said the company planned to use Chapter 11 to reduce debt, shed non-core operations and take steps to get the most value out of its technology and intellectual property.

Major SunEdison shareholders include Oppenheimer Funds Inc with a 11.9% stake, Black Rock Inc with a 6.5% stake, The Vanguard Group with a 6.4% stake and Adage Capital Partners GP LLC with a 5.4 % stake. Investors began to lose confidence in SunEdison's supercharged expansion last summer, when the company announced a \$2.2 billion deal to acquire rooftop solar installer Vivint Solar Inc. At the time, renewable energy stocks were under pressure, in part because falling oil prices sparked concerns about demand for alternative energy sources, Reuters report added.

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- Smart education / *Skilling India*
- Smart health
- Smart urban planning
- Smart security, safety and surveillance
- Disaster management
- Smart manufacturing / *Make in India*

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- 207 exhibition participants
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- Global gas/LNG market and market structure
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- Understanding current trends of the gas organisation structure
- Knowledge of the underlying reasons for gas contract terms and conditions
- Sufficient knowledge enabling construction of gas, LNG and gas transportation contracts
- Expertise for contract negotiation
- Techniques of gas/LNG pricing in a competitive market
- Understanding of operation of trading hubs, spot and arbitrage
- Knowledge of transportation tariff determination methodologies

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How Ashoka Fellows are Addressing Undernourishment in India

The data on the number of Indians undernourished is scary. Almost one in two children under the age of five in India is undernourished. Among adults, 36% of women and 34% of men are undernourished.

One of the gaps in addressing under nutrition is that organizations and practitioners in various sectors are unaware of how their work is linked with nutrition. Ashoka, a network of leading social entrepreneurs from various sectors around the world and in India, is uniquely positioned to foster collaborations to address this challenge. SN features four such entrepreneurs and their work. Profiles sourced from www.ashoka.org.



Kaushlendra Kumar – The IIM Sabziwala

Kaushlendra Kumar, an alumnus of the Indian Institute of Management-Ahmedabad (IIM-A), **is re-imaging the distribution of food in the Bihar region in northeastern India. Starting with 1,000 vegetable farmers in Bihar and 800 vegetable distributors, Kumar founded the Kaushalya Foundation, a complete vegetable supply chain that directly supplies larger food distributors in cities all over India with nutrient-dense foods.** He is demonstrating the potential to enhance people's vitality through the provision of more nutrient replete foods, specifically fruits and vegetables. The process **reduces wastage due to spoilage by 30-40 percent and passes the savings on to the farmers and vendors** themselves.

In Bihar, vegetable and subsistence crop growers are currently at the bottom end of a long supply chain overflowing with intermediaries and mired in inefficiency. In fact, the entire vegetable value chain has no less than six intermediaries between the original farmer and the final consumer. Finally, by the time produce is purchased by vegetable vendors, the prices are so high that there is little room for a final mark up. In this arrangement, the farmers on the one end remain poor and the vegetable vendors on the other end fare no better.

The management staff, Kaushlendra and four young professionals from Bihar, cover their expenses by taking a 3-7% transaction cost on produce before selling to the vendor. Simply put, Kaushlendra and these two





companies coordinate the movement of produce from rural farmers to urban vendors and consumers first by aggregating produce in villages, cleaning and sorting it at distribution facilities, and finally delivering it all to organized vendors. In each village, 5-6 groups of a dozen or so farmers make up collection and knowledge sharing groups called **Kisangaclubs**.

Kaushlendra set up two complimentary organizations under the banner of the **Project Samriddhii: a production company and a marketing company, one working with marginal farmers and one focused on vegetable vendors. Both companies are owned by members, employ professionals groomed from the region, and presently handle 8-10 metric tons of vegetables per day**

In order to make vegetable vending more professional and profitable, Samriddhii assures the vendors that they will **buy leftover vegetables back if vendors agree not to drop prices at the end of the day**. They also ask vendors to **use time-stamped receipts so that all Samriddhii branded vegetable carts can offer a freshness guarantee**. A significant new development is **use of refrigerated vegetable cold cart** ensuring that produce stays cool and fresh for up to ten hours. As Samriddhii grows, farmers and vendors in the region will continue to prosper and Kaushlendra's vision of transforming the river-rich parts of Bihar and then Jharkhand and Uttar Pradesh into India's vegetable supply hub will become a reality. He has transformed the lives of hundreds of farmers and vendors and, though he still introduces himself simply as Kaushlendra, throughout the region he is now fondly

called **Kaushlendra Sabzi Wallah, Kaushlendra the Vegetable Wallah**.



Indu Capoor – Education For Change



Indu Capoor has spent the last three decades promoting health, rights and empowerment of women, girls, children, and youth. She has been strongly advocating for comprehensive health care, with a special focus on gender equality.

Working with field based and government organizations, CHETNA aims to improve access to food and enhance nutrition. More recently, Indu has expanded her focus to include healthcare in her nutrition programs (and advocating for health programs to include nutrition).

Initiated its work in 1980 CHETNA was established in 1984, **CHETNA addresses issues of women's health and development in different stages of their lives from a "Rights" perspective.** CHETNA is an activity of the Nehru Foundation for Development, which is a public charitable trust, registered under the Bombay Public Trust Act 1950. CHETNA supports Government and Non-Government Organisations (GO and NGOs) through building the management capacities of educationists/ health practitioners/supervisors/ managers enabling them to implement

their programmes related to children, young people and women from a holistic and gender perspective and advocate for people centred policies.

Its core activities are capacity building, forging partnership at local, regional and national level. CHETNA also does advocacy, development and dissemination of materials. CHETNA works primarily in Gujarat and Rajasthan States.

Primarily the organization provides support - medical care and advice, advocacy for women and children, and education, for men and women about the importance of understanding the unique health needs of women.

As well as direct intervention and programs, CHETNA conducts regular studies on the health of women, especially rural women, so as to have data to create both policy and social change. They have also published many interactive forms of nutrition education such as booklets, flip cards, audio/visual material and pamphlets.

CHETNA believes that traditional health practices are important for empowering communities, especially those, which are most underprivileged and marginalised. Indu **believes that gender concerns need to be**

With a focus on saving the girl child, Indu started the Centre for Health Education Training and Nutrition Awareness (CHETNA) as a full support and change-making organization



Trainings of Anganwadi workers on Adolescents under SANGAM project of CHETNA.
For more details contact: modeindia.co.in

urgently addressed to overcome gender inequality, which is at the root of most of the inequitable health concerns in our society. A champion for the cause of children's, young persons' and women's health and education concerns, through her extensive advocacy efforts, she has inspired, developed and led a competent team to achieve the vision/mission of CHETNA.

Due to her dynamic leadership, CHETNA has received recognition and several awards at the state, national and international levels, particularly the South Asian region. Over the last three decades, Indu Capoor has **conducted and contributed as a resource in about 2000 workshops, trainings and seminars for government and non-government health, education and development functionaries**. She has presented papers at several state, national and international forums, which have been widely published.

Indu Capoor has conducted evaluations of development programmes from prestigious National and International organizations. She is an active board/advisory member of several state, national and international organizations, which advocate for recognizing the need for focus on health and gender issues, based on field realities of disadvantaged and marginalized sections of society, in policies and programmes. **With Indu's efforts, women are now taking control of their own health, delaying marriage, and when possible delaying first birth.**

Furthermore, CHETNA has been garnering the trust of local women because they are able to share information on nutrition and their bodies that not even the local doctors know. Additionally, the research conducted by CHETNA has become the basis of their advocacy. April 11th has now been declared Safe Motherhood Day. Hopefully this will help to bring awareness to the fact that so many mothers, especially in rural areas die to childbirth unnecessarily.



Biplab Paul – ‘Bhungroo’ For Sustainability



In rural areas of arid Gujarat, India, where high saline soils create an impermeable layer that prevents rainwater from percolating into the soils, **Biplab Paul invented a new rainwater harvesting technology and business model.**

During the rainy season it enables local communities to store fresh water in saline underground aquifers, and then extract it to grow an additional crop during the dry season, which was **never before possible.** The model improves nutrition and food security, economy, and local biodiversity.

Through his organization, **Naireeta Services Private Limited, he has helped transform the very important role of the poorest women in these communities** as they are the core water harvesters available and motivated to do the work during this dry season when many other community members are working elsewhere.

Biplab has introduced a five-stage process for solving the irrigation problem with the re-introduction of **Bhungroo** (meaning straw in Gujarati). This concept does not warrant farmers to pay anything upfront, instead, they agree to a five-year contract to repay the services of water logging-freeing and irrigation water through their cash crop.

Naireeta Services Private Limited and SHGs take loans from financial institutions to install the infrastructure as well as the cost for supplying irrigation water to farmers for next five years. Irrigation cost for food crop (monsoon crop) is waived, so poor and marginal farmers are able to access food security.

Biplab also works closely with universities and governments for a faster transfer of the technology to a wider audience.

Older irrigation systems divert water from rivers to be used in the cities which leads to a decrease in farming and an increase in migration to the cities. The scarcity of water causes both domestic and social violence. Women are most adversely affected by the water crisis, and as a result, they rarely break free from the patriarchal system.

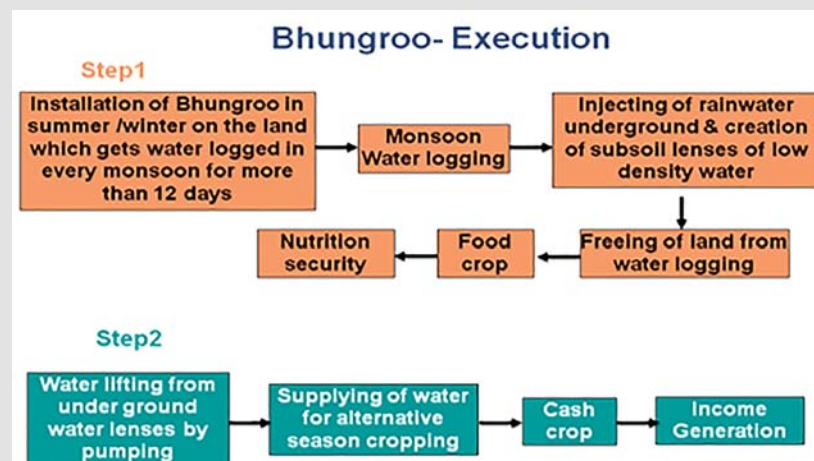
In 2007, Biplab conceptualized the social enterprise Naireeta Services Private Limited, a community-based organization, managed by women. Biplab has borrowed the concept of peer accountability as social collateral from the Grameen

At a basic level, Biplab's idea addresses the threefold problem of the absence of year-round irrigation, lack of women's empowerment, and low crop productivity. He has developed a network of citizen organizations (COs) to spread his work in different regions of India.



Bank. The five women who form a Bhungroo group cannot default on any of the deliverables. Traditionally land ownership rights rest with a male member of the family, but with this new process a power-of-attorney is obtained in the name of the woman member from the male member (i.e. the husband or brother) to make the land a part of the Bhungroo initiative..

Biplab also talks to opinion leaders and policymakers and creates connections for expansion. Gujarat Ecology Commission has replicated this model in other parts of the state while the state education board has incorporated the idea into students' school curriculum. Biplab has collaborated with an international CO for a national level replication of the idea through **178 partner organizations**. He has also collaborated with a couple of COs those are **replicating the concept in the saline coastal regions of West Bengal and Orissa.**



Change Agent, a Boston-based organization has helped Biplab spread his idea to parts of Africa, venture capital companies such as Angel India Investment Network and Wisecraft while Boston-based in conversations with him about financially assisting the replication of his work in areas where banks are not coming forward. In 1999 Biplab participated in the Global Water Summit in Foz de Iguassu in Brazil where he shared the idea of Bhungroo.



Sunanda Mane – Training The Bottom Of The Pyramid



Sunanda Mane is a leader in the key area of training. She is introducing local entrepreneurs into local education systems in order to combat the large gap between knowledge acquired in the classroom and real-life skills required to thrive in rural communities. With the help of **Lend-A-Hand India (LAHI)**, Sunanda brings local farmers into rural classrooms to teach students to

the vital skills needed to succeed in the agricultural sector. Her work has resulted in a sharp decrease in the dropout rate of students over the past four years in rural Maharashtra and has successfully linked together agriculture and education. She is now helping lead Ashoka's Nourishing Schools initiative in India.

Sunanda's vision is to foster rural development by empowering rural youth to develop life skills and create local opportunities. To achieve this, **she leverages local resources to contextualize education imparted to the rural environment and spur entrepreneurship in high schools.** She enables them to explore potential careers and livelihood options that address their interests and aptitudes. While working to develop entrepreneurial skills and qualities in students, Sunanda seeks to ensure that young people remain locally connected. Toward this end, she trains local micro-entrepreneurs to act as role models and become instructors in schools to train students. This helps students remain engaged in a variety of local opportunities, such as basic engineering, agriculture, animal husbandry, health, and energy. In return, apart from monetary incentives, these micro-entrepreneurs are **trained to use the latest technology while availing opportunities to undertake additional work orders from the community and access networks to help expand their businesses.**

Sunanda has convinced over sixty government-aided schools in rural India to adopt her program by aligning her strategy with their interests and has obtained formal recognition from the Government of Maharashtra. As a result, the program appears as part of the transcript of a high school certificate; a full-credit course that has been recommended by the state government to be implemented across the state. **The significant disconnect between the education imparted and livelihood skills needed in rural India is a major contributor toward the migration to urban areas.** Having grown up in a village in Maharashtra, and after working at an educational institution, Sunanda realized the limitations of existing approaches to education in rural India. Her experiences convinced her that she had to **focus on enabling formative students to gain multi-occupational and applicable life skills rather than vocational skills. Sunanda saw existing schools as ideal spaces to implement this idea.**



Approximately 30 percent of the secondary schools in India are government-aided schools and many are located in rural India. To elicit their cooperation, Sunanda designed the program to integrate with, and complement, their existing curricula. **Through her organization, Lend-A-Hand India (LAHI), she works with the school to alter the timetable for the week and dedicate a full day, each week, to the program. Sunanda receives the commitment of the school management, both in terms of time and finance, by shifting the primary responsibility for the launch and implementation of the program to the school.** Instead of recruiting instructors from outside the village, LAHI works with school management to identify and train instructors from within the community; typically local micro-entrepreneurs in the selected fields. Through the program, students' achieve experiential learning through apprenticeships and by serving the needs of their community. Over the course of three years, students get the opportunity to work and reinforce their understanding of over twenty-five activities. LAHI maintains a gender-neutral approach in imparting education. **Due to these initiatives and active participation of the local community, schools have transformed into enterprises—spaces where work orders are carried out, flowers and produce are sold, and the revenue generated through these activities goes back to the school.**

Sunanda reaches approximately 8,000 students in Maharashtra. She recently expanded her work to six schools in the states of Karnataka and Goa. Sunanda intends to spread her work across India through strategic partnerships with other organizations and the government. She has also begun a campaign to convince the Central Government to support and adopt her program under a scheme launched to improve secondary education in India.

The Irony of Jobless Growth And Employment

The Indian economy may be growing at a brisk 7 plus percent, but is it resulting in corresponding growth in employment? It is not. Are the poor households most affected by this economic mishmash? How much does that affect the livelihoods of those without resources and what are the effective policy measures that could help in mitigating this?

These and more are discussed in 'State of India's Livelihoods Report 2015, by Girija Srinivasan & Narasimhan Srinivasan, published by SAGE Impact 2016.

The tough questions and perhaps some answers to them are put out in this report. The questions are: Are the target people part of project design and implementation? How much trust do the players enjoy, if not, what measures are needed to build trust?

Agriculture-based livelihoods suffer from a crisis of confidence. Indebtedness is rampant. And this year's drought is going to make it worse. This 'Livelihoods' report reflects on these issues and offers rich insights.

The report wonders why success of AMUL and GCMMF has not been replicated in other states. It notes that "Success in organizing livelihoods is not just about having sound ideas, but also the passion and commitment." The diary sector needs better attention. Good Designed Project Needed to Lure CSR. The report rightly observes that the new-age corporate CSR is more keen on skill development rather than addressing real livelihood issues. The report asks NGOs and volunteers to offer professionally designed livelihood projects for CSR spending. It has asked the private sector including microenterprises to step up and do their best for solving livelihood issues.

It rightly asks, "When do we plan to have a ministry or a department to look at livelihoods issues in an integrated manner instead of silos." The report is a useful book of conscience to everyone working in the livelihoods field. The challenge is to translate conscience into faster results.!

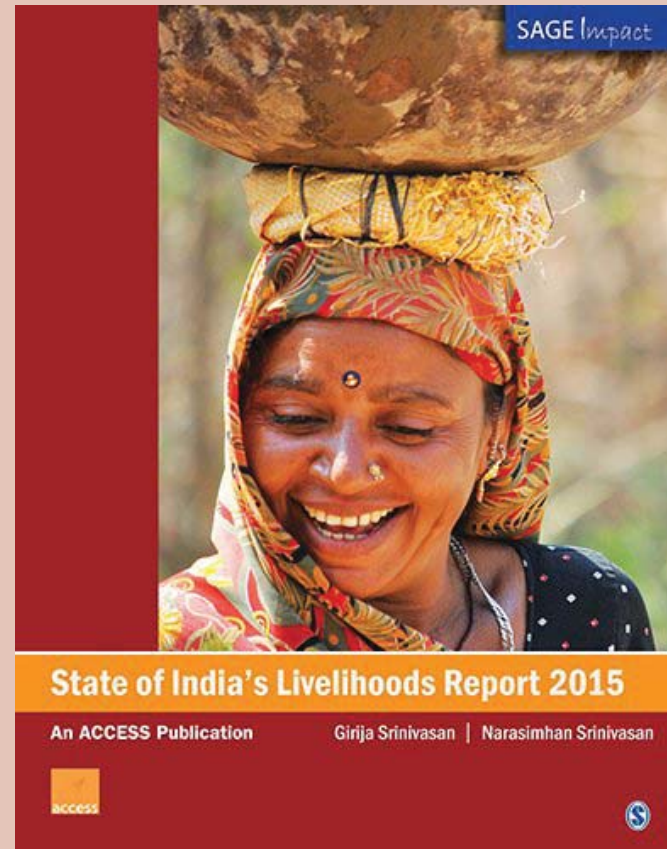
Connecting Good Corporates & Good NGOs for CSR

Problem of plenty is as difficult to handle as problem of scarcity. The Indian government's mandatory two percent spend on CSR projects has thrown up the problem of good companies chasing right projects to fund and the right NGO which can implement them.

The NGO community is eager but is not able to market itself too well. **SustainabilityNext** is one of India's better platforms that can connect the two effectively so that precious time and resources can be used optimally.

The e-magazine is sold on **Magzter.com** and read by more than 40,000 business leaders, NGOs, entrepreneurs and graduate students. Companies can **advertise here** to attract the best of people and NGOs to maximize the impact of their funds and NGOs can advertise to showcase their projects and capabilities.

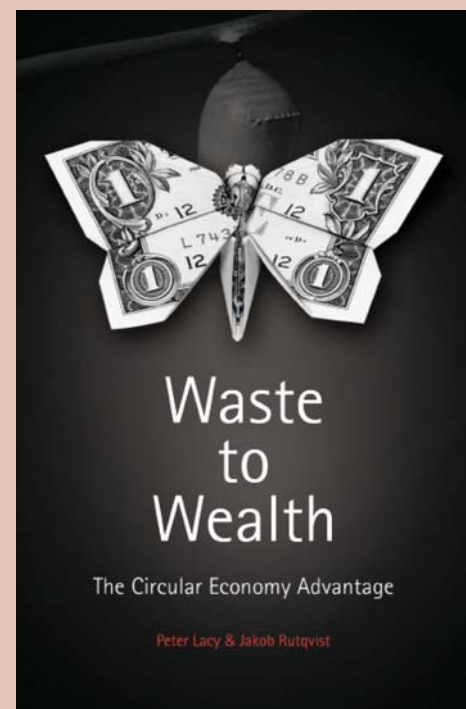
Please write to Uma Haridas at Uma@managementnext.com or call 080-41126557.
www.sustainabilitynext.in



\$4.5 Trillion Opportunity From Waste to Wealth by 2030

WASTE TO WEALTH: CREATING ADVANTAGE IN A CIRCULAR ECONOMY by Lacy, Peter, Rutqvist, Jakob, examines how the circular economy is disrupting the way we produce and consume products.

It proves that 'green' and 'growth' need not be binary alternatives. The book examines five new business models that provide circular growth from deploying sustainable resources to the sharing economy before setting out what business leaders need to do to implement the models successfully. **An Accenture review** of this book examines how the transition to a circular economy may be the biggest revolution and opportunity for how we organize production and consumption in our global economy in 250 years. Powered by advances in digital, it represents a huge opportunity for companies to create a circular advantage. Accenture research indicates a \$4.5 trillion reward for achieving sustainable businesses by 2030.



That's not waste in the traditional sense of garbage, but the enormous underutilization of natural resources. It's about eliminating the very concept of 'waste' and recognizing everything has a value. By carefully choosing the business model that is right for their business, recognizing there is no one 'right' answer for all companies to succeed in the circular economy.

Key Findings

Transforming towards a circular economy means a shift from the old school approach of "take, make, waste" to "take, make, take, make, take, make." How?

- By carefully choosing the business model that is right for their business, recognizing there is no one 'right' answer for all companies to succeed in the circular economy.
- In implementing new business models, leaders make sure to identify and capitalize on external enablers and business ecosystems.
- Securing access to key enabling technologies to support and scale new business models. These technologies can be used to effectively manage resources within markets, ensure waste is eliminated and monetized, serve customers and drive business and product development over time.
- Developing capabilities that effectively deploy and operate circular business principles. The book describes five distinct capability shifts that allow companies to create a circular flow from product design to production, retail, product use, take-back and profitable regeneration and reuse.

5 Business Models Are:

Circular Supply-Chain: Introduces fully renewable, recyclable or biodegradable materials that can be used in consecutive lifecycles.

Recovery & Recycling: Creates production and consumption systems in which everything that used to be considered waste is revived for other uses.

Product Life-Extension: By maintaining and improving products this model elongates their life.

Sharing Platform: Examples include Airbnb, and Lyft. The model helps consumers save and make money while more effectively using assets.

Product as a Service: Prizes performance of a product over volume sales and "leases" products instead of selling them.

BOOKSHELF



Green Is Good: Save Money, Make Money, And Help Your Community Profit From Clean Energy

by Brian F. Keane, Lyons Press, October 2012

Brian F. Keane's book, *Green Is Good*, is a no-nonsense guide to how you, the average American, can easily make clean energy and energy efficiency part of your daily life, saving money, making money, and weaning your community off fossil fuels in the process.

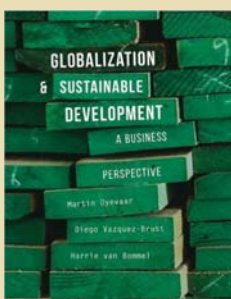
Keane walks readers through the cost-benefit trade-offs of the exciting new technologies and introduces you to revolutionary clean-energy products on the horizon, making the ins and outs of renewable energy easily accessible. Featuring compelling, real-life stories that bring clean-energy problems and solutions from 30,000 feet to street level, *Green Is Good* walks you that last mile from awareness to adoption. It demonstrates how all of us can seize the opportunity and profit from it. Keane also discusses the challenges that clean energy faces, laying out time-tested strategies to overcome them. A renewable energy future isn't just good for the environment; it's good for the economy, and *Green Is Good* will show you how—before it's too late.



Achieving Sustainable Mobility: Everyday and Leisure-time Travel in the EU (Transport and Mobility)

by Erling Holden, Routledge, March 2016

Sustainable mobility has become the new imperative for transport policy. There have been a number of policy attempts at sustainable mobility globally, such as the development of more efficient conventional transport technologies, the promotion of efficient and affordable public transport systems and the encouragement of environmental awareness. Such policies have so often been presented as prerequisites for sustainable mobility that they are now taken for granted. But are any of these policies really successful? To what extent do they actually contribute (or fail to contribute) to sustainable mobility? Why do some policies succeed and others fail? Using an interdisciplinary approach which brings together various theories and methodologies, this book tests each of these policies - or hypotheses, as the author sees them - with detailed empirical investigations. It also argues that leisure-time travel should be included in any sustainable mobility policies, as it now accounts for 50 per cent of all annual travel distance in developed countries. The book concludes by suggesting fourteen theses of sustainable mobility for the EU and a new model for future best practice.



Globalization and Sustainable Development: A Business Perspective

by Martin Oyevaar, Diego Vazquez-Brust, Harrie van Bommel, Palgrave Macmillan, March 2016

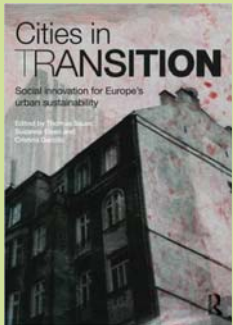
This textbook examines the themes of globalization and sustainability and their impact. It bridges international business, business ethics and sustainable development, exploring classic and contemporary theory and practice, whilst providing an overall picture of what it means to be a sustainable business in today's global economy.



The Disney Conservation Fund (Disney Worldwide Conservation Fund Custom Pub) - Carrying Forward a Conservation Legacy

by John Baxter, Disney Editions, April 2016

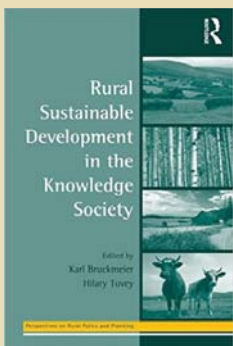
This lush, photo-driven commemorative book celebrates the Disney Worldwide Conservation Fund's 20th anniversary in 2015-2016. The Disney Worldwide Conservation Fund (DWCF), founded in 1995, is a key pillar in Disney's efforts to protect the planet and help kids develop lifelong conservation values. DWCF grants provide financial support for the study of wildlife, the protection of habitats, the development of community conservation and education programs in critical ecosystems, and experiences that connect kids to nature through exploration and discovery. This beautiful book celebrates those efforts in a collection of gorgeous photographs, compelling anecdotes, factoids, and quotes.



Cities in Transition: Social Innovation for Europe's Urban Sustainability

by Thomas Sauer, Susanne Elsen, Cristina Garzillo, Routledge, March 2016

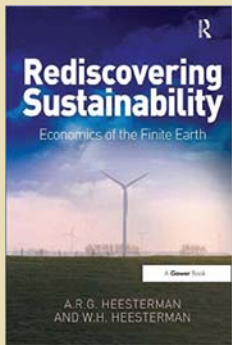
Cities in Transition focuses on the sustainability transitions initiated in 40 European cities. The book presents the incredible wealth of insights gathered through hundreds of interviews and questionnaires. Four key domains - local energy systems, local green spaces, local water systems and local labour markets - have been the focus of the field research investigating local potentials for social innovation and new forms of civil society self-organisation. Examining the potential of new organizational frameworks like co-operatives, multi-stakeholder constructions, local-regional partnerships and networks for the success of such transitions, this book presents the key ingredients of a sustainable urban community as a viable concept to address current global financial, environmental and social challenges. Crucial reading for academics and practitioners of urban planning and sustainability in Europe, *Cities in Transition* is an innovative roadmap for sustainability in changing cities.



Rural Sustainable Development in the Knowledge Society (Perspectives on Rural Policy and Planning)

by Hilary Tovey, Karl Bruckmeier, Routledge, April 2016

Based on the EU-funded CORASON research project, this volume brings together and compares studies into rural and sustainable development processes in 12 European countries. In doing so, it identifies key trends and reveals the changing nature of development processes on the way towards a knowledge society. The book examines the differences between the preconditions and contexts relevant to rural development strategies and those relevant to sustainable development strategies. It explores whether the concept, goals and nature of rural development is better understood and adopted by rural actors than those of sustainable development. Finally by focusing on the ideas and practices of sustainable resource management- a component in both rural and sustainable development objectives- it links with knowledge used by actors involved in rural development.

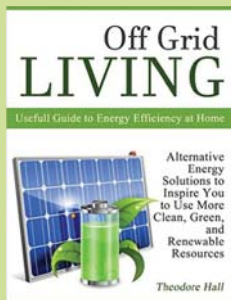


Rediscovering Sustainability: Economics of the Finite Earth

by A.R.G. Heesterman, Routledge, April 2016

Drawing on historical and current data, this thought-provoking book summarises the pathways to the present predicament and maps out strategies to develop financial and economic systems for a sustainable world. The content is arranged in three parts addressing 'Stylised Market Equilibrium', 'The Real Market Economy', and 'Present Affluence Versus the Future'. In Rediscovering Sustainability the authors help bridge the gap in understanding between scientists and the green movement on the one side and many economists on the other. Greens worry about catastrophic climate change and anthropocene mass extinction. Economists express reservations about spending substantial amounts of money on preventing environmental degradation. Aart and Wiebina Heesterman argue that there are inherent limitations in standard economics which cause blind spots in its environmental economics sub-field, as well as issues to do with simple lack of knowledge.

In this timely book, the limitations of the neoclassical economics framework are examined. The authors explore the relationship between Keynesian aggregate economics and financial sustainability, as well as that between scale economies, locational economics and the understated cost of fuel for transport. The impact of economic theory on practice is examined. Conventional economic theory and political compromise bear unhelpfully on an energy market constrained by emissions targets. Rediscovering Sustainability is an invaluable aid to understanding for those teaching, studying, campaigning, policy-making, or involved with the science or politics of environmental and sustainability issues. It is also a book for those concerned with the application of economic theory in any context.

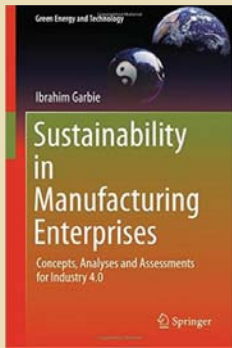


Off Grid Living: Alternative Energy Solutions to Inspire You to Use More Clean, Green, and Renewable Resources

by Theodore Hall, Amazon Digital Services LLC, April 2016

You might have heard the phrase "living off the grid" used for some time now but don't have an idea of what it really means. Living off the grid means providing and relying on your own resources, rather than those of the community. It means you have the willingness to sacrifice material objects in order to achieve something for yourself. For example, spending money to earn more money. Since you are providing for yourself, it means you are not affected by anything going on around you, economically speaking, and you have no use for an excess of funds. If for miles around you there is a power outage, but you have your own source, you may not even know about it because it does not affect your home. To live off the grid means not having to worry about how the economy turns or what the crime rate is in your area. Here is what you will learn after reading this book:

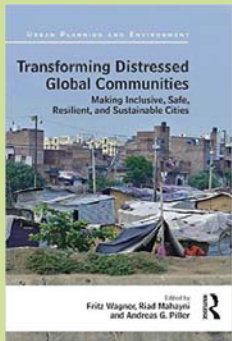
- Why you should consider off the grid
- Power your home
- How to make a steady income
- What off the grid living is truly like
- What to do about health care and insurance



Sustainability in Manufacturing Enterprises: Concepts, Analyses and Assessments for Industry 4.0 (Green Energy and Technology)

by Ibrahim Garbie, Springer, March 2016

This book explores sustainability within manufacturing enterprises and examines the concepts and principles of this field. It also reviews the quantitative and qualitative tools available for analytic assessment. It presents a new framework for sustainable manufacturing requirements and discusses the implementation of sustainable manufacturing in terms of practices, indicators, and sustainability level assessments. The book also details the important conditions necessary for the conversion of existing traditional plants to ones with more sustainable processes. Chapters explore topics including the assessment of economic sustainability, social sustainability, environmental sustainability, sustainable manufacturing practices, and sustainability optimization. Serving as a reference for engineers, managers, and practitioners involved in manufacturing, this book will also be a valuable resource to students and researchers of industrial engineering, manufacturing engineering, systems engineering, and operations management.



Transforming Distressed Global Communities: Making Inclusive, Safe, Resilient, and Sustainable Cities (Urban Planning and Environment)

by Fritz Wagner, Riad Mahayni, Andreas Piller, Routledge, March 2016

Many of our global cities are distressed and facing a host of issues: economic collapse in the face of rising expectations, social disintegration and civil unrest, and ecological degradation and the threats associated with climate change, including more frequent and more severe natural disasters. Our long-held assumptions about man and nature and how they interact are defunct. We realize now that we can no longer continue to build without addressing the long-term impacts of our actions and their spillovers. Energy and natural resources are finite. The way we configure economies has come into question. In the developed world, especially in the United States, infrastructure and the notions that underpin it are outdated. Meanwhile, the developing world is experiencing major, rapid transformations in lifestyles and economies that are affecting billions of people and requiring a whole new way of planning human settlements.

Cities are the key to our future; they represent the most effective vehicle for positive advancements in the human condition and environmental change. This volume argues for the need to redesign and re-plan our cities in holistic ways that reflect our new understanding and relate to their diversity and multi-dimensionality. Presenting a range of case studies from around the world, this volume examines how these distressed cities are dealing with these issues in planning for their future. Alongside these empirical chapters are philosophical essays that consider the future of distressed cities. Bringing together a team of leading scholars, United Nations agencies, non-governmental organizations, private consulting firms, international organizations and foundations, and policy officials, this volume provides a unique and comprehensive overview on how to transform distressed communities into more livable places.

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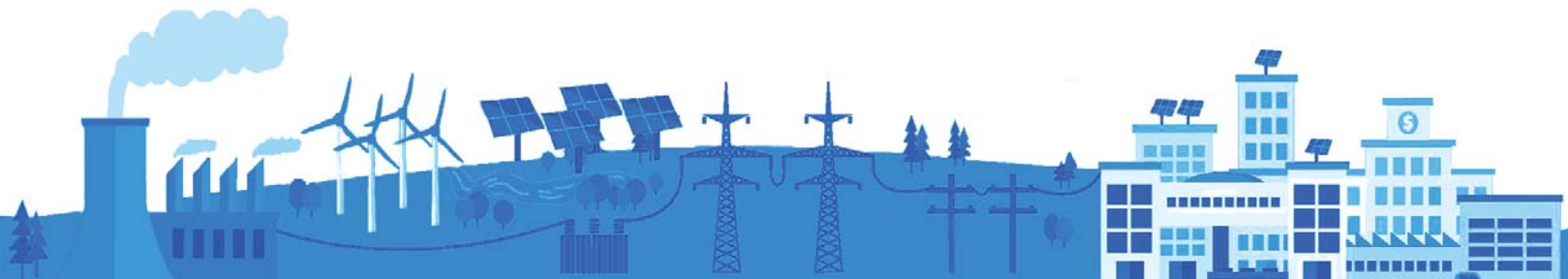
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Budget 2016 – Analysis & Impact on Supply Chain

6th May 2016, Gurgaon

Contact: t.pramila@cii.in

Theory of Constraints (ToC), Lean and Six Sigma (TLC) (5 Day Event)

Monday, May 09, 2016, Mumbai

Contact: Ms Renu Goyal, renu.goyal@ficci.com

Human Capital & Talent Management for Public Sectors

10 - 13 May 2016, Cape Town

Contact: <http://infocusinternational.com/talent/>

1st Smart Transport India 2016 expo

11-13 May 2016, Pragati Maidan, New Delhi

Contact: www.smarttransportindia.com

Training Programme on Warehouse Risk, Safety and Ergonomics

12-13 May 2016, Chennai

Contact: t.pramila@cii.in

5th National Conference on Potential of Plasticulture in India

Friday, May 13, 2016, FICCI, New Delhi

Contact: Rinky Sharma, rinky.sharma@ficci.com

IRCA UK Approved ISO 9001:2015 Quality Management Systems (QMS) Auditor Transition Training Program (2 Day Event)

Friday, May 13, 2016, FICCI, New Delhi

Contact: Mr. Mritunjay Kumar, mritunjay.kumar@ficci.com

FICCI Hospitality & Supply Chain Expo (2 Day Event)

Monday, May 16, 2016, FICCI, New Delhi

Contact: Arshad Danish, arshad.danish@ficci.com

The Responsible Business Summit Asia 2016 - Empowering Suppliers & Engaging Customers

17-18 May 2016, Novotel Clark Quay, Singapore

Contact: <http://events.ethicalcorp.com/rbs-asia2016/>

2nd Annual Responsible Business Summit Asia

17-18 May 2016, Singapore

Contact: elina.yumasheva@ethicalcorp.com

Global MICE Travel Mart (GMTM) (3 Day Event)

Thursday, May 19, 2016, New Delhi

Contact: Ms Samanda Syiem, samanda.syiem@ficci.com

Workshop on Selling Simplified & Assertive Negotiation Converting LEADS to DEALS

Friday, 20th May 2016: Hotel Lemon Tree, Delhi NCR

Contact: chairman.wup@cii.in

Africa - India Partnership Day

Tuesday, May 24, 2016, Lusaka, Zambia

Contact: Ms Santosh Nautiyal, santosh.nautiyal@ficci.com

Legal Requirements related to Environment, Health and Safety based on ISO 14001 and OHSAS 18001 Management System (2 Day Event)

Monday, May 30, 2016, FICCI, New Delhi

Contact: Mr. Mritunjay Kumar, mritunjay.kumar@ficci.com

Conference on Defence Manufacturing Technologies. Theme: Defence Indigenization - Window of Opportunities

3rd June 2016: 0930 Hrs - Hotel Crowne Plaza, Chennai

Contact: k.s.johnson@cii.in

IRCA UK Approved ISO 22000:2005 Food Safety Management Systems (FSMS) Lead Auditor Training Program (5 Day Event)

Monday, June 06, 2016, FICCI, New Delhi

Contact: Mr. Mritunjay Kumar, mritunjay.kumar@ficci.com

International Conference on Water Management

17th June 2016

Hotel Hilton: Chennai, INDIA

Three days conference on “E2E Trimodal Supply Chain - Tackling Future”

27, 28 & 29 July 2016, Crown Plaza, Gurgaon

Contact: cii.ice@cii.in

Strategic Workforce Planning

15 - 18 August 2016, Johannesburg

Contact: <http://www.infocusinternational.com/workforce>

Succession Planning, Performance Management, and ROI on Training & Development

10 – 13 October 2016, Johannesburg

Contact: <http://www.infocusinternational.com/successionplan/>

PowerWeek

7 – 11 November 2016, Singapore

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