

## Annexure 1 – Profiles of the Top 20 ventures Tata Social Enterprise Challenge 2015-16

### Profiles of Top Three winning ventures

#### HelpUsGreen® – Powered by Nature (Kanpur) – Winner

**Profile:** HelpUsGreen® is a Kanpur-based social enterprise that preserves the rivers by flowercycling® the waste from the places of worship into lifestyle products. At HelpUsGreen®, flowers are collected and recycled into bio-fertilizer, incense and bathing bars, among others. It has partnered with Dentsu Webchutney, Oikos Foundation, and Browntape Technologies. HelpUsGreen® is managing five Women self-help group with 16 members each.

Product profile includes Mitti, Sticks and Stones. Mitti® is a first of its kind natural fertilizer (proprietary research). Sticks and Stones® are luxury incense items and are free from carcinogens, coal and chemical based fragrances. The high supply demand gap, social impact and the trendy product design makes the market apt for HelpUsGreen®.

#### Jeevtronics (Pune) – 1<sup>st</sup> Runner-up

**Profile:** Jeevtronics is dedicated to designing and implementing affordable medical devices for underdeveloped and rural areas. It has patented a hand-cranked defibrillator – a life-saving device for heart patients – which has a built-in power generator that enables it to work in off-grid rural areas, mini ambulances and disaster relief camps, among others.

There is a critical unmet need in the cardiac care. People are dying of sudden cardiac arrest and the facilities are available for 1 in 50 beds in a hospital. The hand-crank generator requires 12 seconds to charge and comes at one-fourth the cost of competition. This system will deliver a Bi-Phasic shock with less than 15 seconds of cranking.

Jeevtronics is planning to target untapped segments like Disaster relief camps, small ambulances, small private hospitals, army camps & PHC/CH with an estimated market size of 2.7 Billion USD External defibrillator market by 2020.

#### Hasiru Dala Innovations (Bengaluru) – Joint 2<sup>nd</sup> Runner-up

**Profile:** Hasiru Dala Innovations is committed to creating predictable livelihoods for waste pickers through providing total waste management, urban gardening services and products for sustainable living. The model is designed to enable a circular economy that enhances the lives, be it a waste picker or a resident, it touches. The service is a comprehensive one-stop solution that includes management of in-site wet waste processing.

The venture is supporting waste pickers to collect from 10,000 households in the city. It has also, in collaboration with Waste Wise Trust, Radio Active and Jain University, created a unique certification course called 'Enhancing skills of small entrepreneurs in recycling industry'.

Revenue is generated through flat fee collection from households as well as from various event organisers and also from urban gardening services

**Disease Diagnose Group – Reinventing global health diagnostics (Boston) – Joint 2<sup>nd</sup> Runner-up**

**Profile: Disease Diagnose Group (DDG)** has developed a hand-held malaria detector called Rapid Assessment of Malaria (RAM). Out of every 1000 malaria infections, only 500 fevers are identified, 250 tests are performed and only 125 diagnoses are accurate. This device, called RAM for short, detects a magnetic substance that malaria parasites release when digesting red blood cells thus providing a faster and more accurate diagnostic test than those used currently, and at a much lower cost. The device is reusable, mechanical, fast and sensitive, and the technology is clinically approved.

**Profiles of the seven ventures, apart from the Top Three winners, that have made it to the top 10 finalists (no particular order of listing):**

**Aadhan Infra – Containers for Development (New Delhi)**

**Profile: Aadhan Infra** is a social venture which provides a mobile and ready-to-make room space for Sanitation, Education and Health care purposes. It is a pioneer in modifying shipping containers into mobile infrastructure for the social sector. On site, the container of a truck expands horizontally to maximise the space available and facility is finalised for ready to use within a month of the order.

The pilot project IKYA GOVERDHAN, U.P. (MoRD) for classroom facilities has been undertaken. Prominently three products are introduced:

1. Skill training unit which is delivered to Project Implementation Agencies and Government schools through MoRD, MHRD, U.P & MHRD, Himachal Pradesh
2. Health unit which is targeted to CIES distributed through Saujanya Foundation
3. Miscellaneous projects are handled through website

Revenue is generated through skill training, health treatments and utilising sanitation facility.

**Cattle Mettle – It's time the next 'White Revolution' (Jodhpur)**

**Profile: Cattle Mettle** is a social venture which supplies the cost-effective cattle feed at 50% lower than market price. It sources raw material from sustainable resources like Mesquite Pods which are nutritious, highly invasive. It is then manufactured with the help of rural farmers and produce cattle feed with high protein and ether content. The aim to serve 3M cattle heads daily in next five years in Rajasthan.

In present milk production cost, there is 70% cost skewed towards Cattle feed cost and only 10% organized cattle feed market is present in India. There is a growth of 25% CAGR in this market.

According to revenue and business model, Cattle Mettle is partnered with NGOs/Social enterprises and incentivising rural group in collection of raw materials and sales are done through both B2B (To dairies and cow shelters) & B2C (to collection groups) markets. Low costs in turn contribute to profit maximisation. Currently, it is raising Rs. 65 lakh through private equity impact investments and grants from Government/Philanthropies for Natural Resource Management and Livelihoods generation.

### **Dazl- MyKavach Wearable Technology Pvt. Ltd (Gurgaon, Haryana)**

**Profile:** Dazl represents a curated line of elegant fashion accessories focused on women's safety. It merges technology with fashion. Dazl communicates with Smartphone via Bluetooth Low Energy that saves battery life and uses a modular technology module, which can be transported from one kind of fashion accessory to another in a range of colors. It is a women's wearable technology for Safety, fashion & Function.

Women's safety is a social concern in India. According to reports, each day 92 women are raped in India daily, but 90% of rape cases are unreported. In 2013 alone 34,000 rapes were reported. It's time consuming or very difficult to access a Smartphone, Safety App or safety devices such as pepper sprays during an emergency. Plus a pepper spray or shock gun can backfire. Dazl is wearable and instantly accessible.

Sale of fashion accessories with embedded software linked to the Smartphone app through Bluetooth Low Energy. Suggested retail price is INR 2000. Advertisement revenue Localised and customised deals if permitted by user as the GPS location would be tracked by the Dazl App each hour upon user permission, anonymously. Subscription revenue for real time live voice recording that is accessible to well-wishers over the cloud if the SOS button is pressed. Revenue is generated through licensing SDKs to health and standalone safety apps and by ordering services via push buttons on Dazl and revenue shares.

### **Dhvani – Sharing a Voice! (Mumbai)**

**Profile:** Dhvani is an AAC (Augmentative and Alternative Communication) wearable device for helping people suffering from ALS - Amyotrophic Lateral Sclerosis (e.g. Stephen Hawking), LNS - Lesch-Nyhan Syndrome, Cerebral palsy and similar paralytic disorders to communicate with the rest of the world.

The Venture will be based on a self-sustaining non-profitable Hybrid business model. In Phase 1, 20 devices will be manufactured and distributed for validation purpose and sold to the same patient later on if succeeded. For patients who cannot afford Dhvani, 36.11% of the total profit earned will be donated to make it accessible for them.

Till now, it had successfully implemented Dhvani 1.0 in July, 2015 with the help of Tata Center for Technology and Design (TCTD), IIT-Bombay. It successfully designed and tested the new electronic circuitry for Dhvani 2.0 and is in the process of manufacturing Dhvani 2.0.

### **District Horizon - Revolutionising Rice Farming Globally (New Delhi)**

**Profile:** District Horizon developed the World's First Successful 'Powered Urea Deep Placement (UDP) Applicator'. UDP has Higher Benefits & Cost for UDP with Applicator is less than the current cost of Urea Application. This in turn assess the productivity, reduces the soil contamination and increase soil organic content.

Nearly 70% of urea is getting wasted in rice farming and \$2 billion worth is imported. There is total need for 10 Lakh UDP Applicators to cover 43 Million Hectares of Rice Cultivation.

Currently, the firm is targeting the India and Bangladesh market. In India, with assumed Reach of our UDP Applicator of 15% of total (1.5 lakh Machines); assuming that time to reach maturity for acceptance in market will be 15 years. Accordingly, in 2020, estimated selling price is Rs. 2 lakh per machine with a margin of Rs. 80,000 per machine and sales of 8,400 machines in India. Key partners are IFDC, TATA Chemicals Limited and VFRC. Till

now, the company has successfully developed the Powered Urea Deep Placement Applicator over 8 versions and 4 years of Rigorous R&D, sold 2 machines to Tata Chemicals & 1 Machine to IFDC Bangladesh and critical Partnerships are achieved, all-round team & advisory board (critical for reaching institutional customers) created.

### **OnionDev Technologies – Building the bottom up Media platform for the next 5 BILLION (New Delhi)**

**Profile:** OnionDev Technologies' business aim is to build the bottom up Media platform for the next five Billion through Mobile Vaani. Mobile Vaani is an interactive and collaborative media platform for the underserved population, to inform, engage and empower them. Mobile Vaani builds social media platforms equivalent to Facebook/YouTube/Twitter for rural areas. Mobile Vaani becomes a unique platform serving rural and low-income communities. The USP is the system enables people to share as well as get customised information over a simple toll free phone call from any mobile or landline. The use of simple voice calling makes the platform accessible to even poorly literate people. On the other hand, for business clients (B2B), Mobile Vaani offers a unique low cost per reach platform than any traditional media.

**The Business model:** Content moderators recruited locally to manage the content who hears the information from the local and larger Community. Then Messages shared in the voice of the people themselves. Simultaneously tagging, transcription, and analysis is conducted to understand the users. The revenue is generated through advertisements, campaigns and enterprise solution and costs involves engagement and acquisition cost.

### **Profiles of the Top Ten Semi-finalists (no particular order of listing):**

#### **Doctor next Door - Because every second in an emergency is precious! (Mumbai)**

**Profile:** DND business model transforms the way emergency medical response is currently being given in Indian Healthcare sector. It is planned to provide the fastest emergency response by investing in pharmacists and social activists by aggregating them and bringing them on-board through high incentives and certified training on CPR. Model is based on the fact that “Any but quick” help goes a long way than “Expert but late” help. So, it is App based emergency medical service from nearest available doctor. Pilot project was conducted in Andheri to check the real time functionality based on availability of DND's.

Revenue is generated through the service charge per customer, annual membership fees of patient from insurer and commission from various hospital tie-ups.

In the last decade, 1.2 million died in road accidents. At least 50% of these could have been prevented had the people received help on time. 30% of emergency patients in India die before they reach a hospital. Over 80% of accident victims do not receive access to medical care within one hour of the incident.

#### **Dry Toilet for Ladakh –Don't flush it in Ladakh (Leh-Ladakh)**

**Profile:** Dry Toilet is a dry soil flush and redesigned toilet seat, both of which can be easily installed on top of the existing traditional toilet. This concept is an additional benefit looking from the point-of-view of tourism in Ladakh and willingness of people in Ladakh to invest in maintaining the traditional design in order to attract more tourists. It addresses the problem by eliminating the negative features of traditional toilet which are enough to make people

desire an alternative solution. Problems such as manual operation, discomfort and aesthetic displeasure exist, which create a large impact in the modern world.

Revenue stream is generated by providing different parts of the redesign toilet system, installation charges and design services. As the business grows both in terms of revenue and awareness in other parts of the Trans Himalayan region, improvement in the system will continue and in future, it is planned to develop parts for export purposes.

Recently, a prototype has also been tested and many different forms and function explored. At the end, three different systems have been conceptualised. Most of the research work is done both in terms of business opportunity and design possibility.

#### **Impact Guru - A fundraising platform for Indian nonprofits (Mumbai)**

**Profile:** Impact Guru is an online crowd funding and fundraising SaaS platform that empowers anyone to give to non-profits (NGOs) in India while linking Facebook posts to social impact. Through our SMILE (Social Media Engagement Linked Engagement) innovation, company can engage a large section of the population by treating the mere act of sharing a social cause via Facebook posts or tweets as a micro-donation (worth Rs 5 - 1,000) by reducing the fundraising fee as the number of social media shares grow.

**Business Model & Innovation:** Connecting the act of sharing a social cause via Facebook to making a micro-donation (up to Rs 10 per share). If the number of share is less than 500 then platform fee will be 10% and above 500, it is 5%. As number of shares increase, there is increase in community awareness, number of donors, funds for non-profits.

Till now, Impact Guru raised INR 16.20 lakh+ for 20 nonprofits since commercial launch in Sep'15. Now, it is aimed at raising 25 crores for social sector through 5 key initiatives – Youth engagement program, Events based fundraising, Indian community outside India, CSR/Payroll giving, Google & Facebook ads.

#### **ODR Ways – The Court Outside Court (Kolkata)**

**Profile:** The ODR Ways is a team which developed an idea to build a portal that can resolve legal disputes online. This concept is known as Online Dispute Resolution (ODR). The benefits of cyber-mediation include cost savings, convenience and the avoidance of complicated jurisdictional issues. It is an idea which can make justice easily accessible anywhere and anytime we want.

There are more than three million pending cases, which would require 464 years to clear the backlog. Litigation is lengthy and costly and the problem is inaccessibility to justice and we are planning to eliminate that by bringing justice at people's doorstep.

**Commission model:** Customers will be paying the fees of the mediator. Our profit will be the convenience cost we will be charging them.

**High Level Financial Projections for three years:** The model is going to start with family disputes. According to calculations, it is estimated to generate revenue of more than Rs. 60 Lakh (~\$100K). The more cases they solve, the more cases they will get. In three years, it has the potential to create a self sustainable model.

### **Resilient Ventures - Building disruptive medical devices for masses (New Delhi)**

**Profile:** Resilient ventures are pioneered in designing a patent pending product, Cardiac Monitoring Unit. Cardiac diagnostics by doctors are limited by facilities present at the hospitals. In most cases, the cardiac instruments are bulky and non-portable, which reduces its scope of usage. This low cost non-invasive portable Cardiac Monitoring Unit will be a disruptive breakthrough. This is a 4-in-1 solar powered portable cardiac monitoring unit. It comprises of 4 major units: a) 9-lead ECG monitoring device, b) clinical diagnostic electronic stethoscope phonocardiograph, and d) semi-automatic digital Blood Pressure apparatus. By interfacing with any mobile device/laptop, doctors can view graphic representations of normal & abnormal cardiac ailments at primary level.

**Business model:** The device can be installed in Hospitals, OPD, SICU, ICCU, and Post operative wards, Dispensaries, Medical colleges and Homes. The business model is primarily based on pay per use. The device is supplied free of cost to doctors/clinics/hospitals. Secondary revenue stream will include aggregated data and analytics reports from these screenings and selling that to pharmaceutical companies looking to target patients.

### **Soteria Solutions - Securing Developing Nations (Mumbai)**

**Profile:** Soteria Solutions has designed a Digital Surveillance system, Novis2 for households, retailers, offices, etc. and NovisX for corporate parks, public authorities with the help of old and spare smart phones.

In the present market scenario, 0.16 Tons of smart phones included in E-waste of turnover of India with an expected CAGR growth of 34% and the Indian Surveillance Market stands at USD 4.6 billion. The idea is to use old, spare smart phones which consumers may have or which we may source, refurbish them, install our applet and set up the system at the consumer end. It is very sustainable and has cutting edge features like motion alarms, record on motion, cloud storage, automated storage management, etc.

### **Studio Coppre - A Social Enterprise Impacting Artisans & Indian Craft Heritage (Pune)**

**Profile:** Coppre is a niche brand working with handcrafted metal wares. The portfolio of products falls under **utility** and **décor items**. Distinctive designs that capitalise on are the unique properties of the material copper, married to a functionality or benefit and with strong narrative properties.

There is resurgence in demand for well-designed, skilfully made, quality hand-crafted wares, woven with rich traditional stories for customer engagement. Metals and specifically copper are trending on the international home décor and design landscape. They design and market their wares globally.

### **Swayambu Innovation Pvt. Ltd – The Energy Within (Bihar)**

**Profile:** Swayambhu is a social venture working towards natural pesticides and irrigation facilities for farmers at the bottom of the pyramid. Their product portfolio includes bio-pesticides and bio-fertilizer. In form of service & product, they could able to reduce input cost; increase farmer's saving and improve soil fertility & moisture.

There is absence of electricity at farm, unavailability of bio-products, lack of irrigation facility, declining agriculture, unemployment. The company installed a small gohar based biogas plant among a cluster of houses in a village of Samastipur district of Bihar. This provides an inclusive development of an agriculture sector, reduces 40% input cost in farming.

The revenue is generated through price on service provided, price of product. The major costs include Fixed like Plant Installation, machinery, pipelines, etc. and variable costs like salary and raw material. The expected profit in three years is 10%.

#### **Tatva Gyan – Refining Education (Odisha)**

**Profile:** Tatva Gyan provides high-quality, affordable early childhood and remedial education support in rural India. They are establishing and operating a lean chain of quality and technology-driven affordable learning hubs called ‘Think Zone’ which are managed by local women which is in turn creating women change makers and leaders in local communities through dignified white-collar livelihood opportunities. A process-oriented approach allows receiving real-time analytics on student performance, instructional quality and overall progress.

**Two services are offered:**

- 1) **Pre-school:** Tatva Gyan provides a good foundation for children from low-income families who want affordable pre-school education.
- 2) **After-school:** For low-income families who want to supplement their wards’ limited school education, Tatva Gyan provides a level-based and not age-based programme, thus giving each child a chance to catch up with the class level requirements.

The learning hub (Think Zone) acts as a unit. It costs us INR 4200 in local expense to set up the hub, INR 33000 in capital to equip it, and INR 6300/month to keep it in order. Revenue is generated through fees which are an average of INR 250 per student per month for both the programmes. So once there are 35 students from both the programmes, expected to generate INR 29400 in net profit per hub, recouping entire expenses in about 13 months.

#### **Toto Express – Digitize to Discover (Mumbai)**

**Profile:** Toto Express is providing a digital platform for tribal artists to market their hidden unique talent and open new paths of monetization. The company teaches artists in rural areas how to digitize their artwork and then sell them. By focusing on digitizing art it avoids movement of physical product, increasing exposure and decreasing overhead. Digital assets provide significant advantages over old physical craft business models like instantaneous distribution, easily applied on various mediums.

The business model of Toto Express is making an artist accessible in the shortest supply chain. The revenue is generated through design licensing and selling to customers directly. The advantage for artists is 50% share or 5% status quo. Till now, the company has bought \$100 of Phad art, sold art worth \$25,000 in designer journals, licensed Gond art to a luxury women’s apparel brand and created a virtual supply chain to sell art copies globally.

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