

Jugaad Innovation: A Frugal, Flexible, and Inclusive Way to Grow

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**UNCSTD, Geneva
January 23, 2017**

Unique Features of Indian Innovators

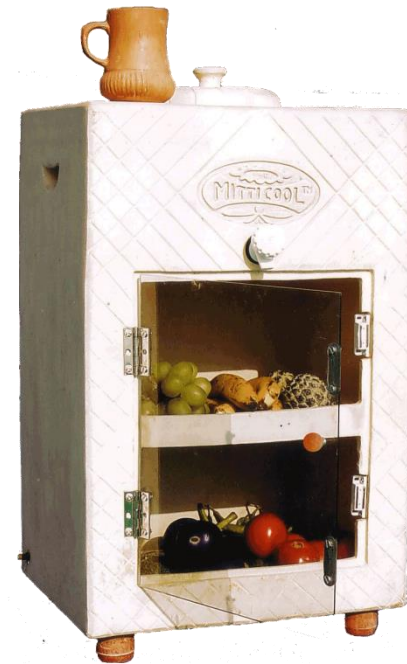
Frugal

Flexible

Inclusive

Thinking Outside the (Ice) Box

Source: <http://gizmodo.com>



Source: <http://www.mitticool.in/>

Thinking Outside the (Hot) Box



Jugaad Innovation

The art of overcoming harsh constraints by improvising an effective solution using limited resources

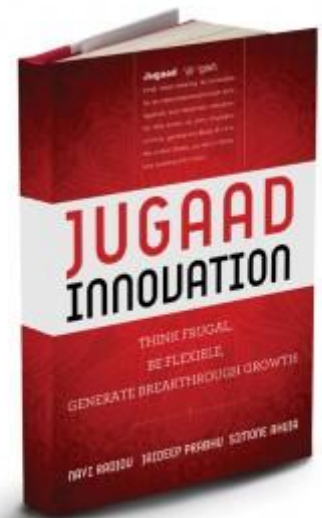
Gambiarra or jeitinho in Brazil

Kanju in Africa

Jiejian Chuangxin in China

DIY in the US

Systeme D in France



Why Does India Need Jugaad?

Upwards of 40% of Indians:

Are unbanked

Are off the electricity grid

Have limited access to healthcare and education

Changing Class Structure

2005

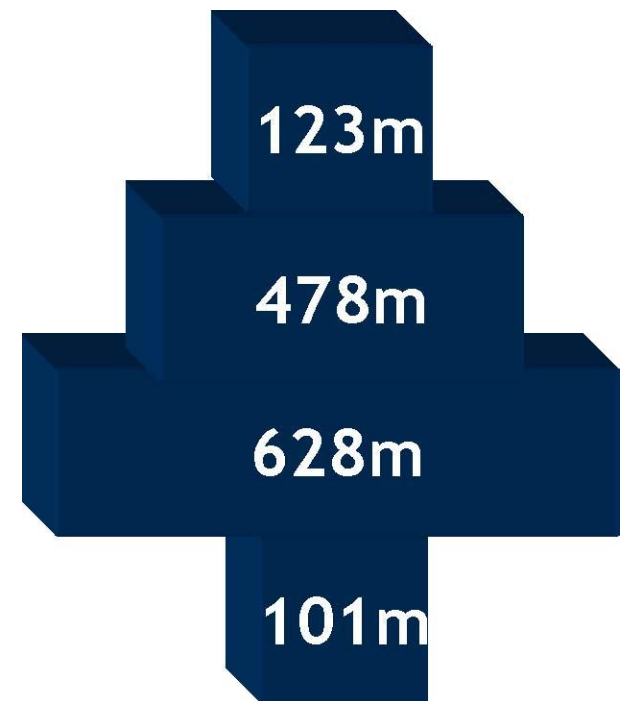
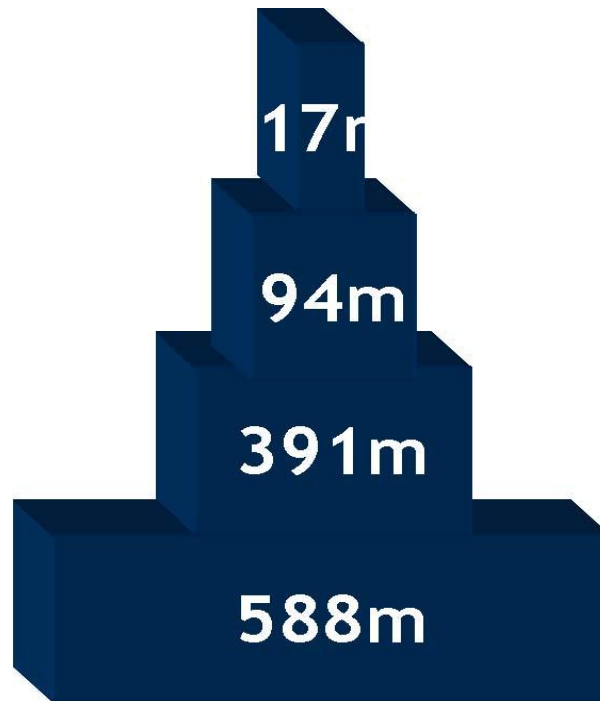
2020

Upper-Middle
\$10,000+ PPP⁽¹⁾

Middle
\$5,000-10,000 PPP

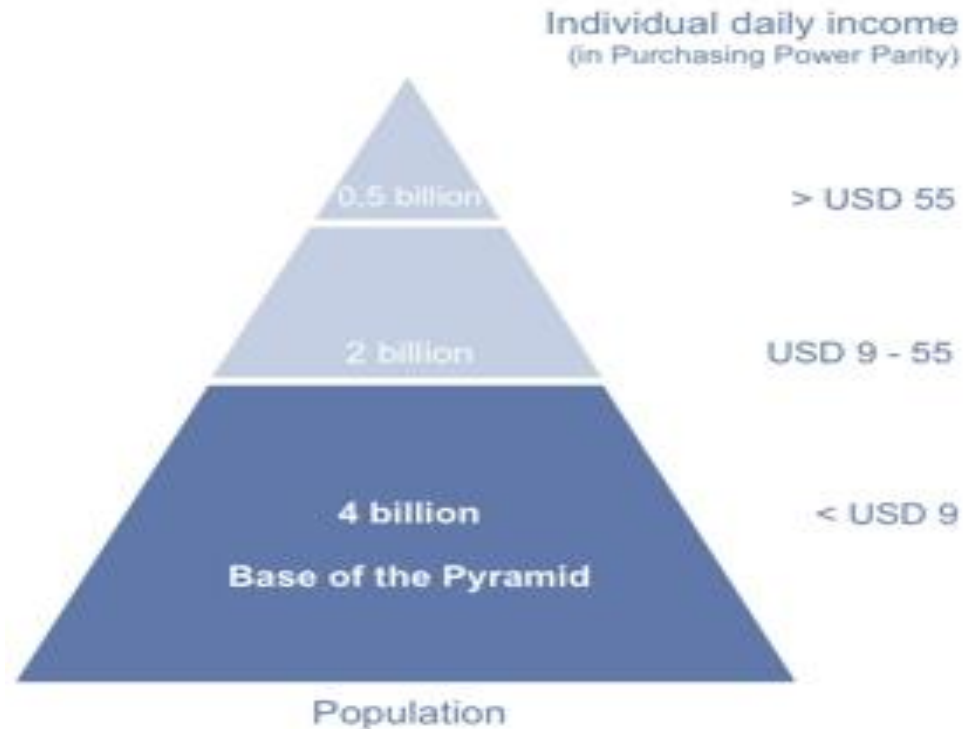
Emerging
\$2,500-5,000 PPP

Poor
Under \$2,500 PPP



Why Does the World Need Jugaad?

The World Economic Pyramid



Source: World Resources Institute

Why Does the World Need Jugaad?

BOP market—\$5 trillion

TOTAL BY INCOME SEGMENT

BOP3000



BOP2500



BOP2000



BOP1500



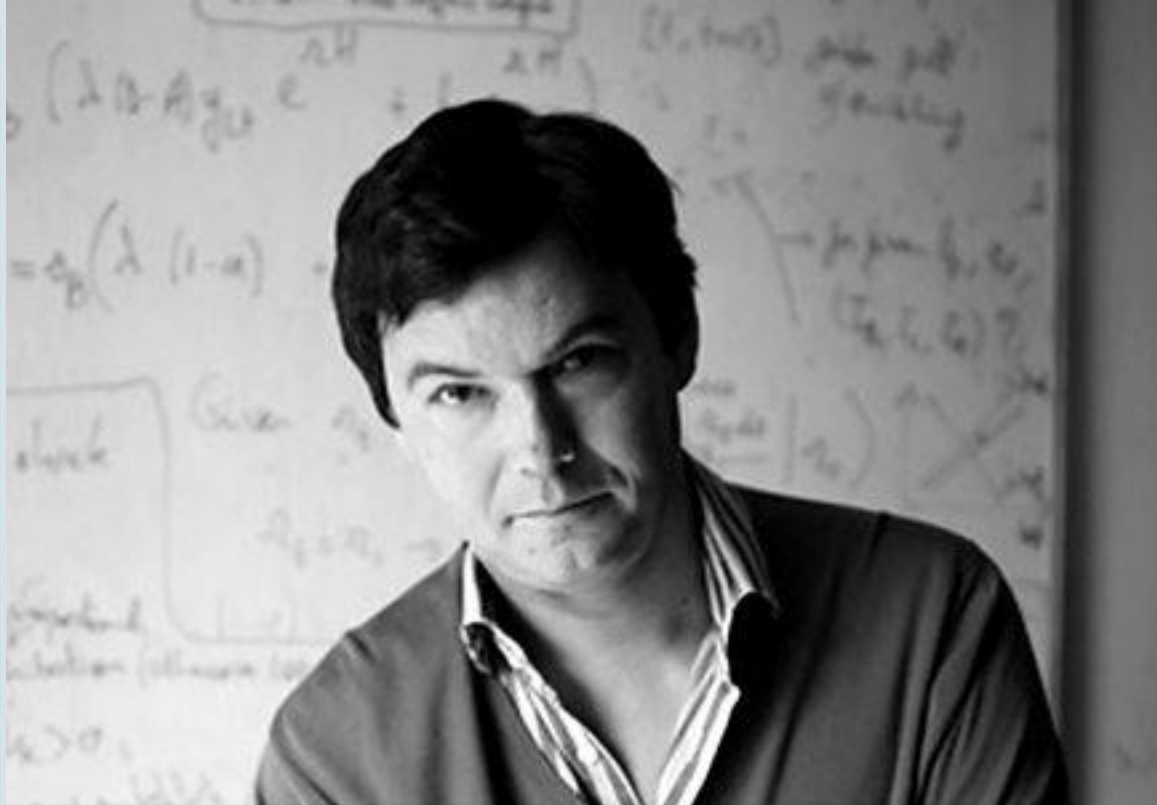
BOP1000



BOP500



Why Does the West Need Jugaad?



Thomas Piketty, Paris School of Economics

The West must learn to do « better with less »!

Social Entrepreneurs

Mansukh Bhai and the MittiCool Fridge



Dr Mohan's Mobile Diabetes Clinic



Source: <http://www.drvmohan.com/>



Source: <http://www.worlddiabetesfoundation.org/composite-2731.htm>



Harish Hande and SELCO

SELCO



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sustainable energy

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Course Information:

SELCO Case Study #126

Logged in as: honorstudent

Logged into Classroom:

Faculty:

Dr. J. Prabhu

Learners:

B. Donahue

J. Kibira

S. Ahuja

A. Betker



SELCO SOLAR

Posted On: April 16, 2009
Posted In:

SELCO Solar Pvt. Ltd, a social enterprise established in 1995, provides sustainable energy solutions and services to under-served households and businesses. It was conceived in an effort to dispel three myths associated with sustainable technology and the rural sector as a target customer base:

- 1) Poor people cannot afford sustainable technologies;
- 2) Poor people cannot maintain sustainable technologies;
- 3) Social ventures cannot be run as commercial entities.

SELCO aims to empower its customer by providing a complete package of product, service and consumer financing through gameena banks, cooperative societies, commercial banks and micro-finance institutions.



CAMBRIDGE
Judge Business School



Devi Shetty: Frugal Surgeon



Large Domestic Organisations

Tata and the Nano



Tata “Swachh” Water Filter



Aakash Tablet



BRAC

World's largest NGO: employs 100,000 people, reaches 126 million people in over 11 countries

Diversified: health, education, finance and social enterprise

Covers 80% of its costs through own revenues

Best practices from business; constantly learning

Bangladesh and Social Businesses

The home of social businesses

Grameen, BRAC and Asa: three of the world's largest microfinance organisations

Generate surpluses but plough these back into scaling their social mission

Multinationals & Inclusive Innovation

GE and Affordable Innovation

ECG machine designed specifically for
India's rural markets

Portable, light, battery operated, reliable,
cheap



Launched in China, and now in the US after
having got FDA approval

Siemens: Foetal Heart Monitor



The Nokia 1100

Specifically for emerging markets:

Dustproof keypad and front face

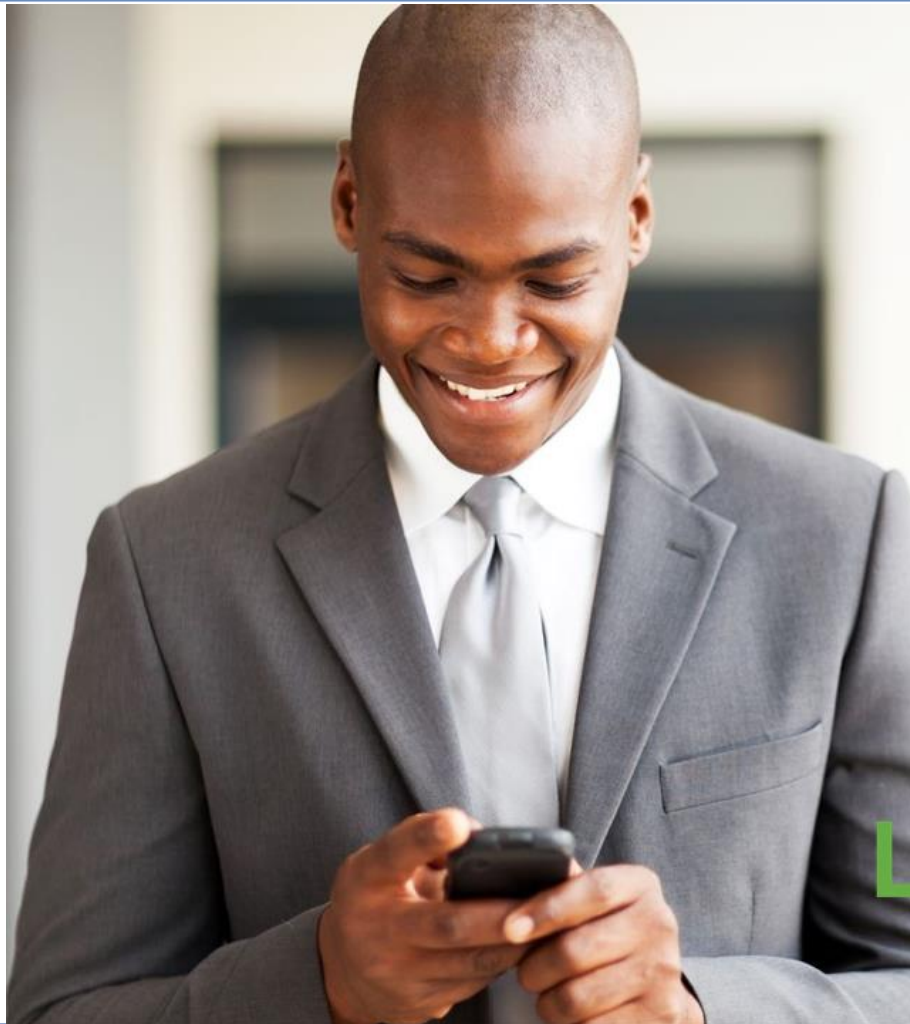
Built-in flashlight

Over 200 million sold since late 2003



World's best selling handset and consumer electronics device

M-Pesa and Mobile Payments



Selling Solar Lighting Solutions



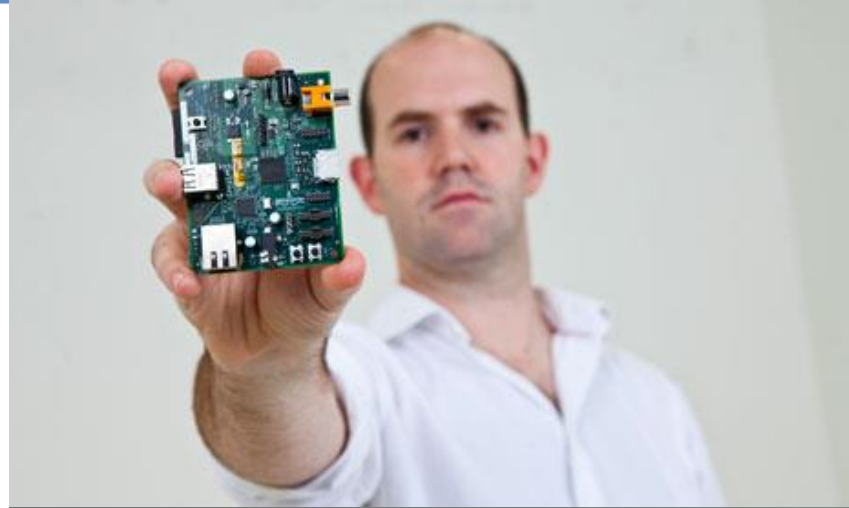
Photo: M-KOPA

Inclusive Innovation in the West

Ebon Upton and the Raspberry Pi

“Design intended to inspire schoolchildren and adults to program”

Demand for Raspberry Pi, the British \$35 computer, “crashes website”



Prabhu Subramanian and CoLearnr



CoLearnr



3D Printing: Increasingly Affordable



- Welcome
- Membership
- Classes
- Events
- Facilities & Amenities
- TechShop Locations
- Equipment Reservation Calendars
- Services & Programs
- FAQs
- TechShop News
- Contact Us
- Job Openings

stay in touch

Promo Code?





Photos: EMBRACE

Challenges of Inclusive Innovation

Small organisations are inherently frugal and agile but lack resources to scale

Large organisations have the resources to scale but are wasteful and slow

Solutions for Inclusive Innovation

Partnerships between small and large, local and global are needed

Governments and public institutions like UNCTAD and UNCSTD can be cheerleaders and match-makers

Conclusion

Frugal, flexible, and inclusive innovation can help the world achieve the SDGs

The West can gain by engaging with counterparts in the developing world

Large and small, North and South, can work together improve lives everywhere

Thank You!

