SNS COLLEGE OF TECHNOLOGY

Re-accredited by NAAC with A+ grade, Accredited by NBA(CSE, IT, ECE, EEE & Mechanical)
Approved by AICTE, New Delhi, Recognized by UGC, Affiliated to Anna University, Chennai

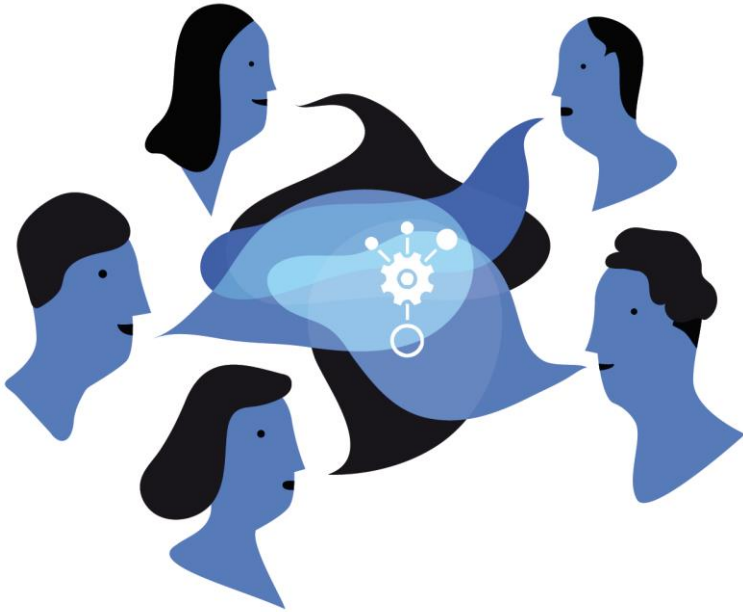## Department of Computer Applications

Grassroot Innovation

COURSE : 23CAT608- ENTREPRENEURSHIP DEVELOPMENT

UNIT II : PROJECT PLANNING

CLASS : I MCA / II SEMESTER

Grassroots Innovation

It refers to the development of new solutions or ideas by local communities, often driven by the need to solve practical, everyday problems.

Key Features:

- Locally driven

- Resourceful and affordable

- Focuses on immediate, practical needs

Key Drivers of Grassroots Innovation

Manihar Sharma, a 65-year-old Manipuri invented a **solar powered silk reeling** machine

22 Yr old Imli Toshi from Nagaland is a post-graduate in computer applications developed **Water lifting vane pump**

Community Needs: Local problems drive innovation.

Resource Constraints: Limited resources push for more efficient and cost-effective solutions.

Cultural Knowledge: Local traditions and knowledge contribute to unique solutions.

Collaboration: Cooperation within communities or with external actors often drives innovation

Key Drivers of Grassroots Innovation

- **Community Needs:** Local problems drive innovation.

- **Resource Constraints:** Limited resources push for more efficient and cost-effective solutions.

- **Cultural Knowledge:** Local traditions and knowledge contribute to unique solutions.

- **Collaboration:** Cooperation within communities or with external actors often drives innovation

- **Sustainability Transitions:** Plays a role in driving sustainable development by promoting local solutions and addressing environmental and social issue

Goals of GREEN Technology
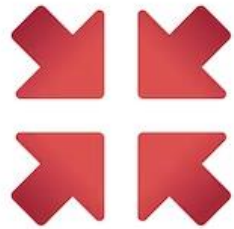
REDUCE
- Fuel
- Waste
- Energy consumption
- Using clean water
- Purchasing

RECYCLE
- Paper
- Plastic
- Batteries
- Clothing

RENEW
- Wind power
- Water power
- Solar
- Bio-fuel
- Waste water

RESPONSIBILITY

RADICAL THIKING FOR FUNDAMENTAL CHANGE

Grassroots innovation

Grassroots innovation

❑ Voluntary generation and development of innovations by any member of an organization, regardless of function or seniority

❑ community-led solutions for sustainability

Grassroots innovator

❑ Networks of activists and organizations generating novel bottom–up solutions for sustainable development;

❑ solutions that respond to the local situation and the interests and values of the communities involved

A simple but effective solution to any major problem is not considered as an accomplish

Grassroots innovation

Growing ladies' fingers around a cotton crop to prevent pests from attacking the cotton

More than 90% of the products in grassroots innovations use second-hand components.

[Pochampally sarees](#)

5 Hour work is replaced with 1.5 Hrs

Handloom weaver Chintakindi Mallesham Made the machine

Grassroots innovation

Panihari of Khimjibhai Kanadia
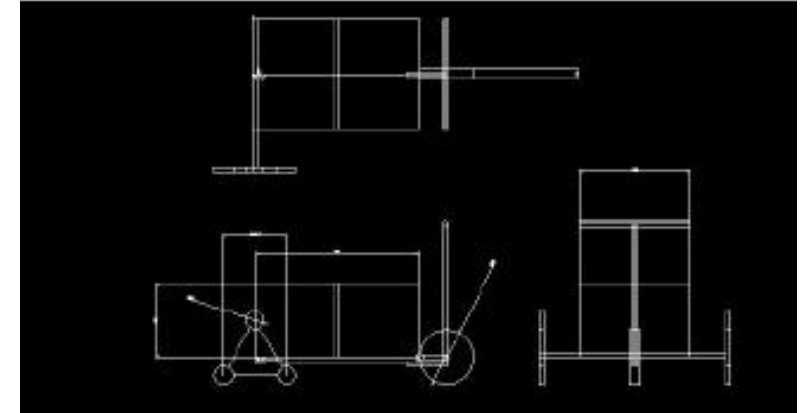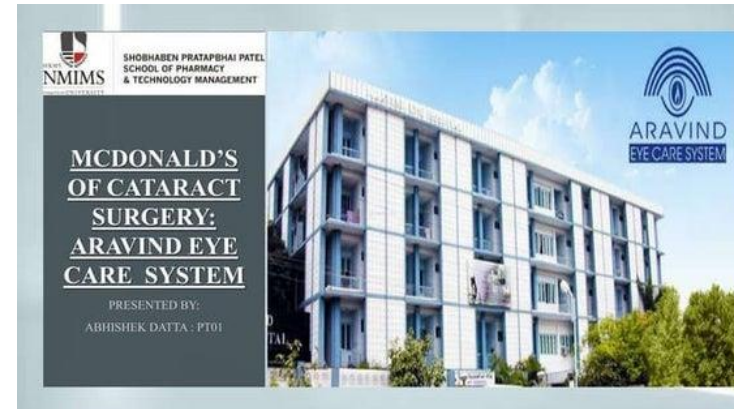
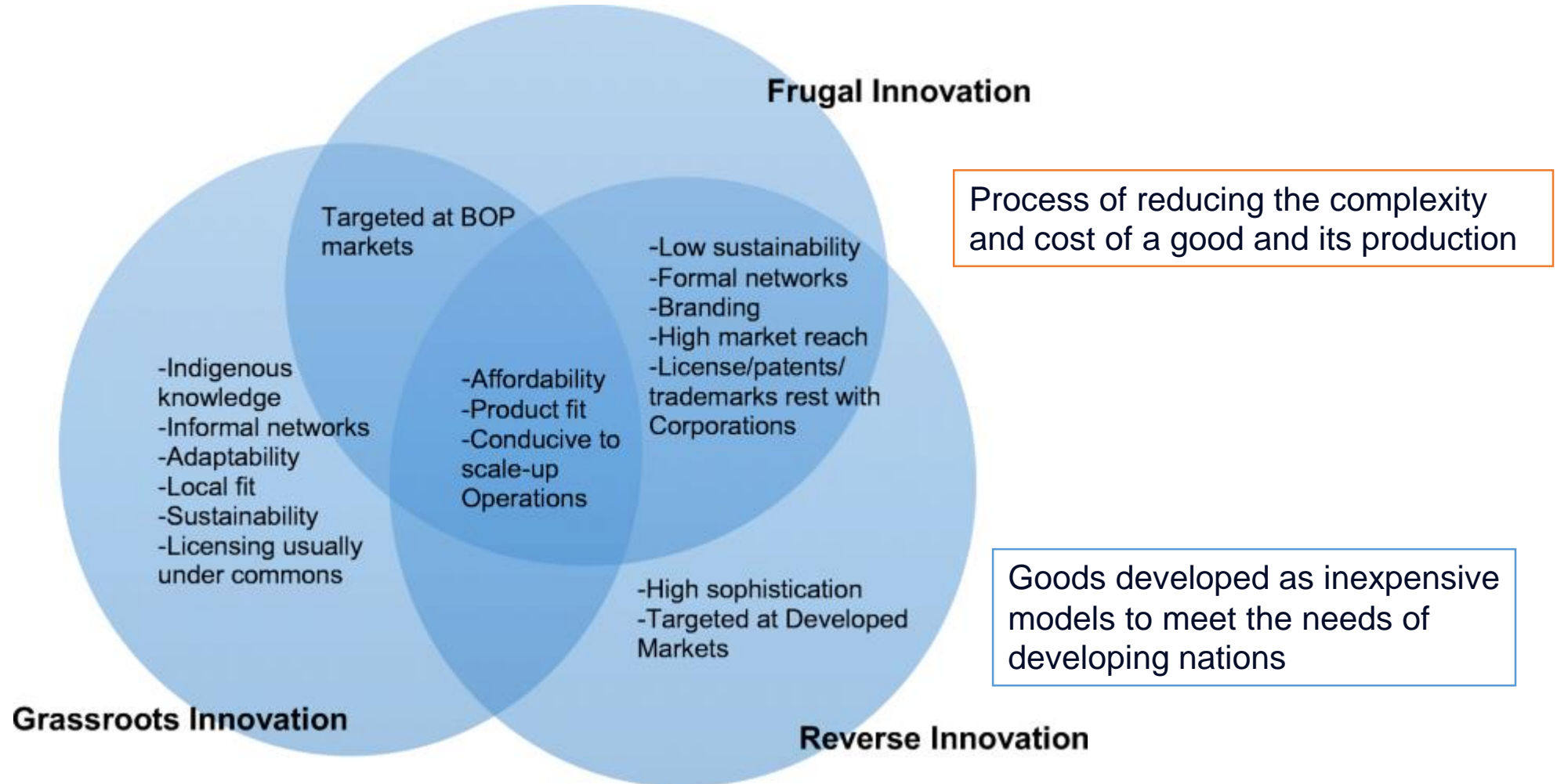Hill trolley with triangular wheels. By

Understanding Grossroots Innovation

❑ The grassroots innovators deal with such inertia during design, failure at various stages, or delivery every day.

❑ They succeed in overcoming it by persisting, pushing through different problems, and coming up with a solution

❑ Many grassroots innovators share their knowledge without expecting anything in return

Comparison

Frugal Innovation

Targeted at BOP markets

-Low sustainability
-Formal networks
-Branding
-High market reach
-License/patents/
trademarks rest with
Corporations

-Indigenous
knowledge
-Informal networks
-Adaptability
-Local fit
-Sustainability
-Licensing usually
under commons

-Affordability
-Product fit
-Conducive to
scale-up
Operations

-High sophistication
-Targeted at Developed
Markets

Grassroots Innovation

Reverse Innovation

Process of reducing the complexity and cost of a good and its production

Goods developed as inexpensive models to meet the needs of developing nations

Grassroots innovation - Acceleration

❑ Encourage local governments to become an active stakeholder

❑ Foster a grassroots community to share research, know-how and talent
   Provide technological mentorship towards advancing a circular economy

❑ Correct systemic racism, injustice and oppression

❑ Measure the impact made on marginalised youth at an interdisciplinary level

❑ Localise the context of solutions to support disadvantaged communities

❑ Mobilise academia and youth to keep driving the momentum forward

❑ Become a global thought leader in inter-generational innovation