BELT
(Biofuel Engine Longevity Test)

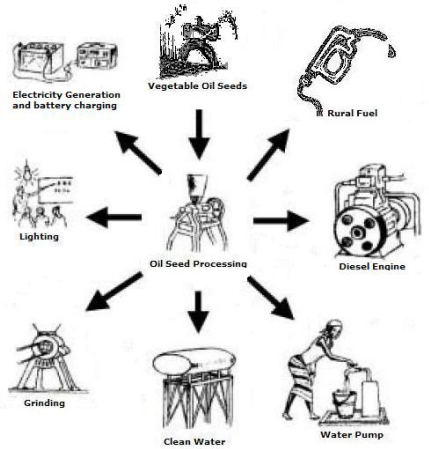
Columbia University

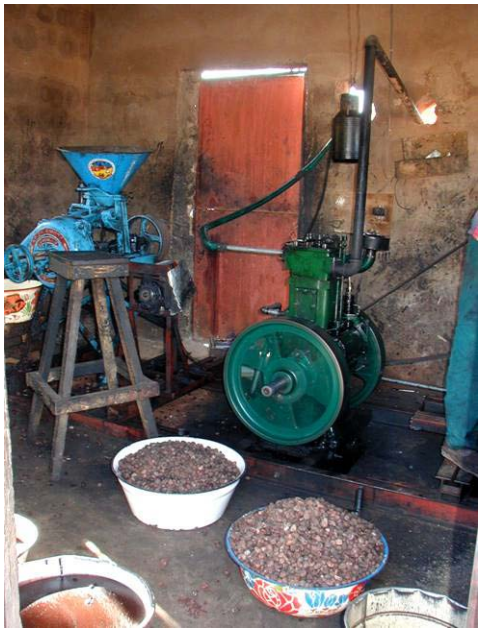
Manhattan College

City College

Context & Motivation

- Resource limited settings
- MFP's (Multifunction Platforms)
- Non-edible plant oils





Approach

<u>Possibilities</u>

- Similar energy density
- Increases lubricity

<u>Limitations</u>

- Higher viscosity
- Poor cold flow properties

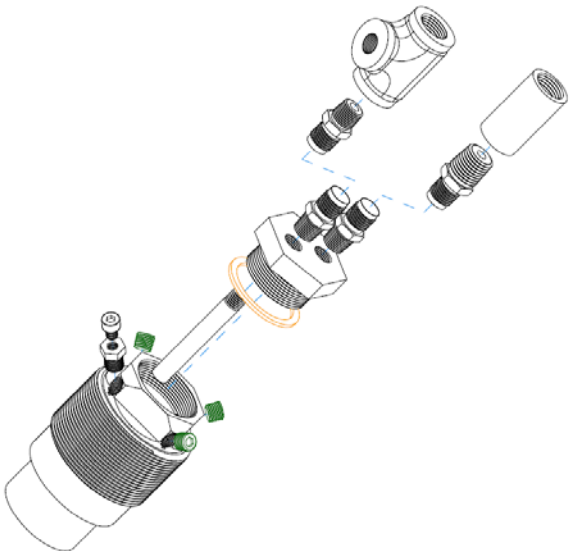
<u>Alter fuel</u>
Biodiesel

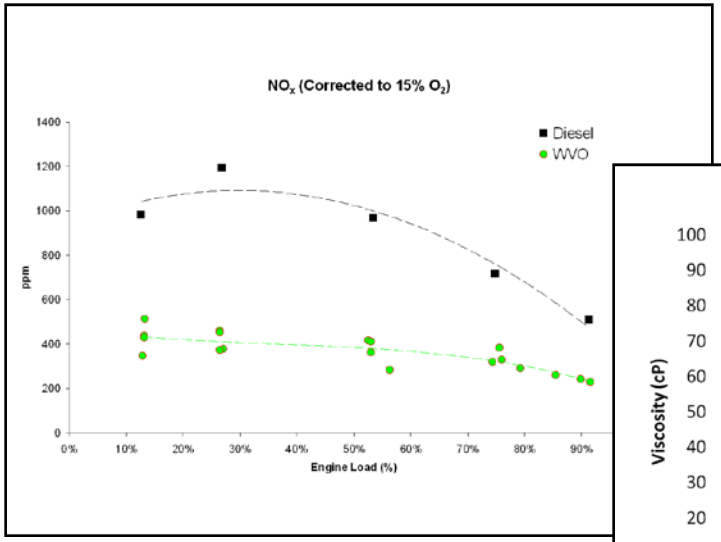
<u>Add a Kit</u>
Pre-heat

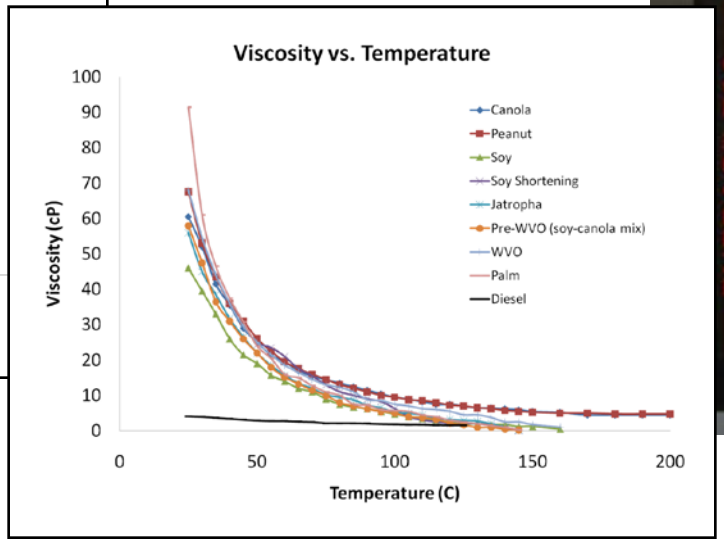
<u>Alter engine</u>
Elsbett

Methods

1. Design, build, test kit
2. 500 hour longevity test
3. Lab & Field test sites







Participants

NYC: Columbia University, Manhattan College, City College

Field Partners: Pilgrim (Uganda), Makerere University (Uganda), Mali Biocarburant (Mali)