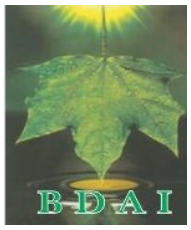


RUCO

REPURPOSE USED COOKING OIL

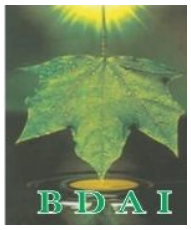
RUCO Initiative

3rd EU-India Conference on Advanced Biofuels
New Delhi, 3rd – 4th March 2020



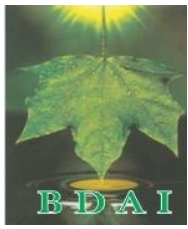
RUCO initiative launched 10th August 2019 by MoP&NG and MoH&FW





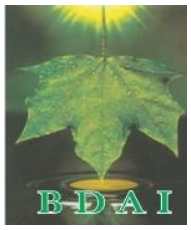
Genesis of RUCO

- ▶ BDAI took up UCO for Biodiesel in 2012
- ▶ Joint campaign along with FSSAI since 2018
- ▶ Countrywide survey on UCO estimation
- ▶ Trust transparency and traceability - RUCO web portal
- ▶ Trial supplies to IOCL and BPCL with CSIR-IIP certification

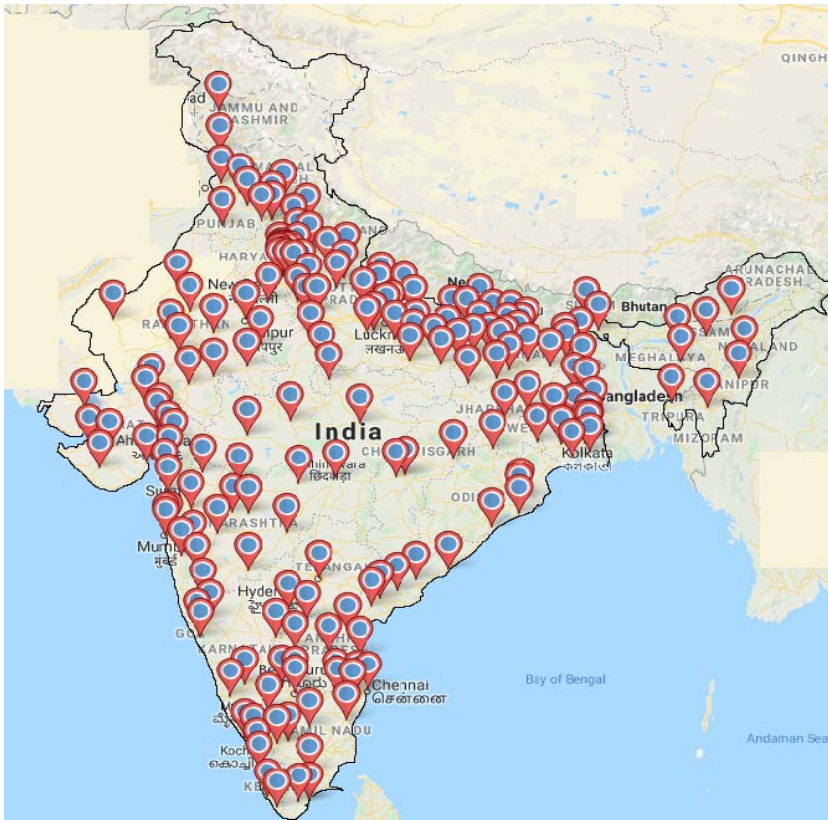


Veg Oil Consumption pattern

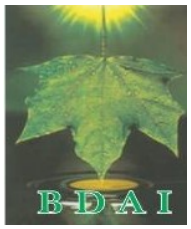
Description	Metric Tons	Percentage
Total Veg oil Consumed	2,22,00,000.00	100%
FBO	<u>59,94,000.00</u>	27%
Soap & Oleochem	73,26,000.00	33%
Household consumption	88,80,000.00	40%



Expression of Interest



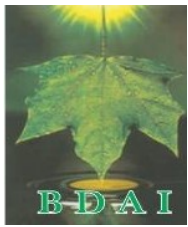
Jointly by IOCL, HPCL
and BPCL across the
country



Survey Methodology

- Standard of living
- Total Population
- Food habits and consumption patterns
- Big Data Analysis
- Per Capita Consumption range 17.5 -20Kgs

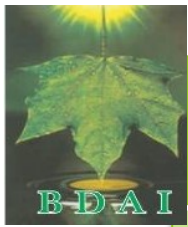
A	Urban Class A cities		20 Kgs	
	Soaps & Oleochemicals	33%	6.27	
	Household consumption	40%	7.60	
	FBO/QSR/Processed Foods	27%	5.13	7%



Supply side

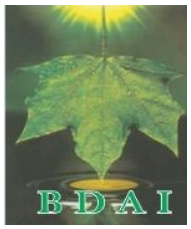
22.2 Mn T

Source of vegetable Oil(MT)		
Import	1,50,00,000.00	68%
Domestic	72,00,000.00	32%
Total	2,22,00,000.00	

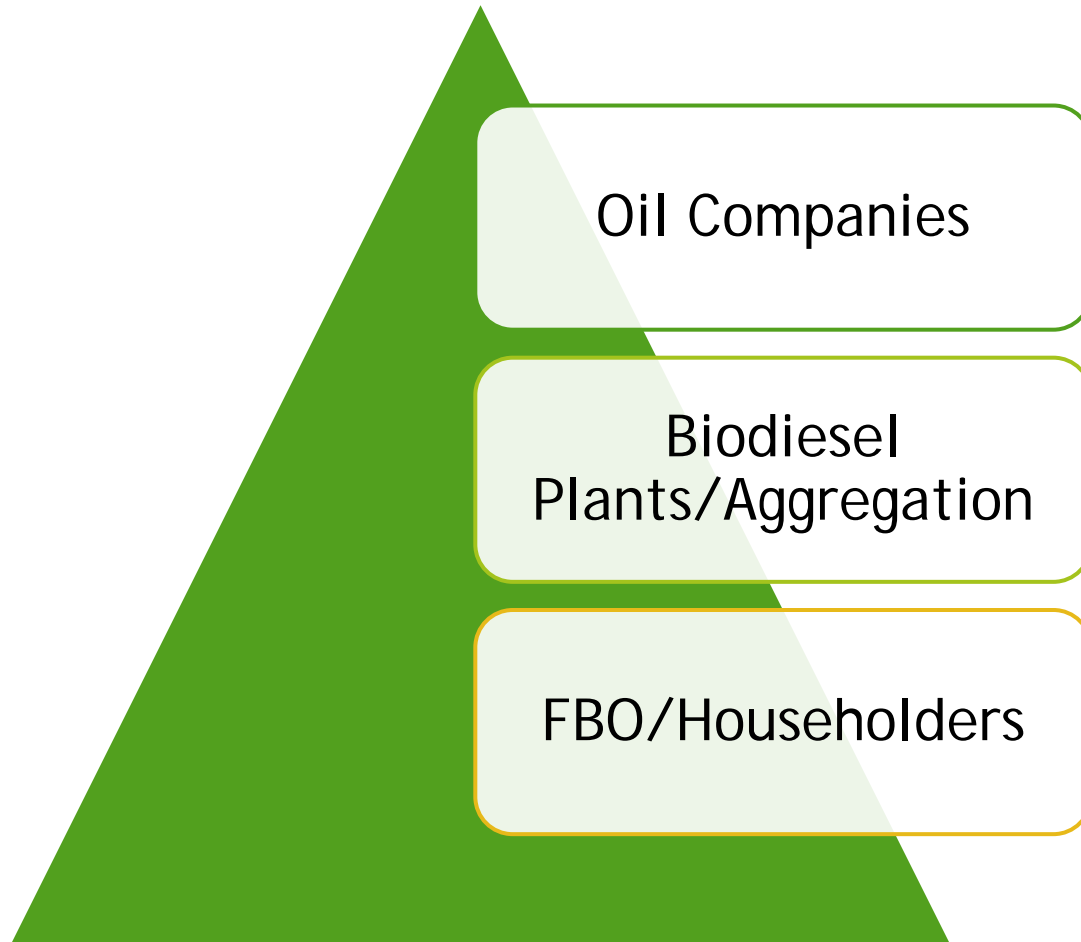


UCO generation by Type of FBO(1st year)

Description	Metric Tons	Percentage of total consumption	Discharge % by industry type	Discharge Qty
Large FBO's with Automation	5,99,400.00	10%	3%	17,982.00
Medium FBO Conventional	20,37,960.00	34%	20%	4,07,592.00
QSR/Canteens/Catering	23,97,600.00	40%	30%	7,19,280.00
Consumed as Ingredient	8,99,100.00	15%	0%	-
Fine Dining	59,940.00	1%	1%	599.40
				11,45,453.40



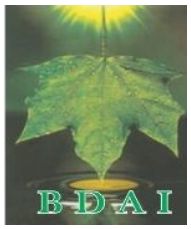
Eco system Created by Policy



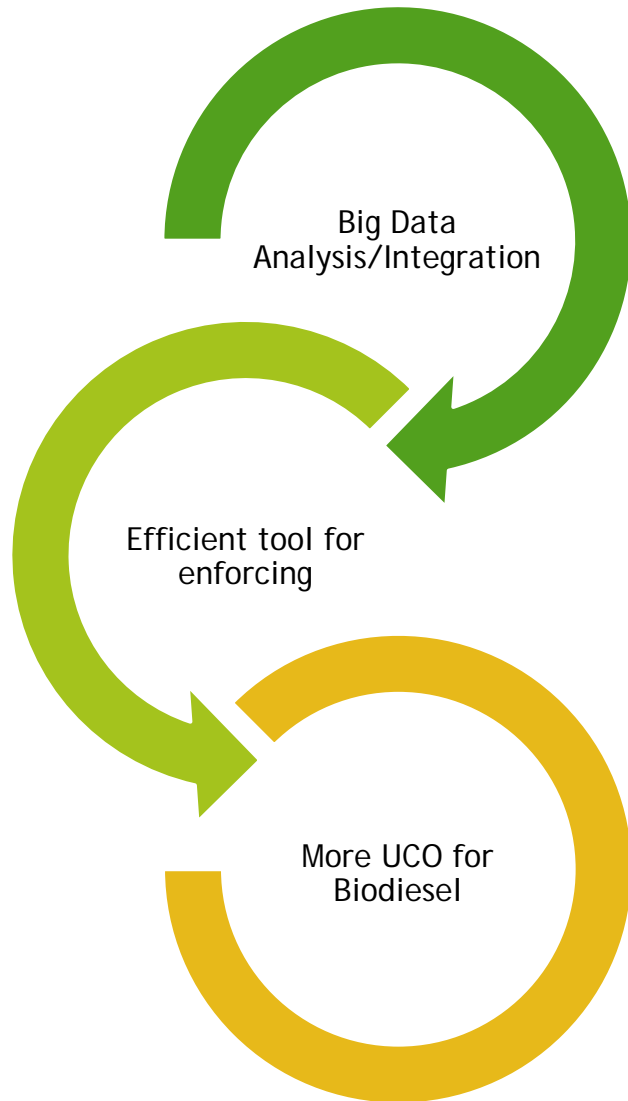
Oil Companies

Biodiesel
Plants/Aggregation

FBO/Householders

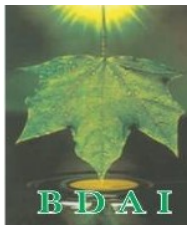


Technology intervention



- ❑ Big Data analysis-integration will ensure UCO availability
 - Total Production/imports/sale of Veg oils
 - Purchase of Veg oil by FBOs
 - Standards consumption norms for each cuisine
 - Estimating the UCO creation in each district
 - Tracing sales of UCO to RUCO system

- ❑ Efficient tool for enforcing agencies-FSSAI/FDA/Municipalities -more UCO into the RUCO ecosystem



Ecosystem





Thank You!

Sandeep Chaturvedi

President Biodiesel Association of India

Members Working Group on Biofuels Ministry of Petroleum & Natural Gas

Member U.P. State Biofuel Development Board

Member BIS Committee on Petroleum and & Related Products

Member Executive Committee- Rajasthan State Biofuels Authority