



**Triveni**  
ENGINEERING & INDUSTRIES LTD.

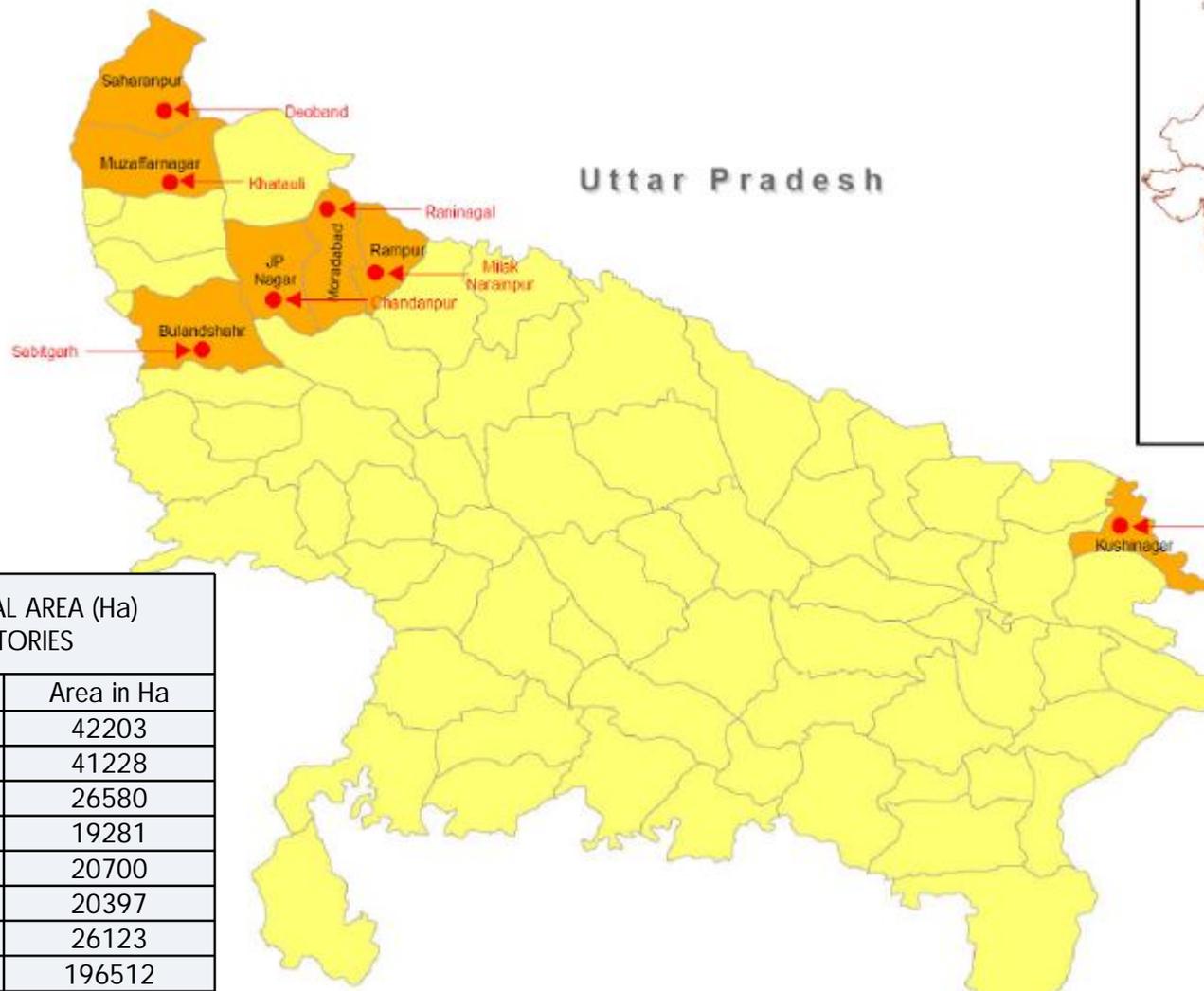


# SSI Experience in Triveni Sugar – UP

On behalf of Er. A K Tanwar, President Sugar



# Location Map – 7 Sugar Factories of TEIL



OPERATIONAL AREA (Ha) of FACTORIES	
Unit	Area in Ha
Khatauli	42203
Deoband	41228
Sabitgarh	26580
Chandanpur	19281
Raninangal	20700
Milak Narainpur	20397
Ramkola	26123
<b>Total</b>	<b>196512</b>

### Crushing Capacities (in Million Tonnes)

- Khatauli : 28.8
- Deoband: 25.2
- Sabitgarh: 11.7
- Chandanpur: 10.8
- Raninangal: 9.9
- Milak Narainpur: 10.8
- Ramkola: 11.7
- Total: 108.9**



# Basic details of Triveni

- Total Operational area – 1.96 lakh ha
- Total crushing capacity of 7 units – 108.9 million quintals
- Crushing trends (lakh quintals)
  - 2010-11 – 45.61
  - 2009-10 – 45.90
  - 2008-09 – 37.34

# Key Issues of Growers and Triveni!

## Growers

- Rising Costs of Cultivation with static or declining yields
- Unavailability of good quality seed material
- Improper cultivation practices
- Water table depleting year after year
- Unpredictable climatic aberrations
- Less remunerative with associated risks at every stage

## Triveni

- Under utilisation of installed capacity and short crushing period due to non availability of cane
- Low sugar recovery
- Competition from other cash crops
- high seed rate - inadequate coverage of targeted area
- No mechanisation due to closer spacing
- Cyclical fluctuations and uncertain export outlook
- Companies running at losses

# Encounter with SSI!

- ❑ Heard about SSI and contacted WWF-ICRISAT in 2008
- ❑ Conducted SSI Field trials in 25 acres with 1 lakh bud chip seedlings in 2008-09 with support of WWF - ICRISAT
- ❑ Inspired by the results, embarked upon scaling up of SSI in 7500 ha in 7 sugar units in 2010 spring season
- ❑ But achieved 1250 ha with about 4000 farmers taking up SSI
- ❑ Mixed results due to huge targets, lack of staff capacities, inadequate backstopping support to farmers, etc.



# But many encouraging results ...

## Chandrapal Singh (Devrala village, Bulandshahar District, UP)



- Seedlings planted: 3400 in 4 Beegha's (0.75 acre)
- Variety: Co 238
- Spacing: 4 x 2 feet (SSI) against 2 x 1/2 feet (Traditional)
- Yield with traditional method: 330 Qtls/acre
- Yield with SSI: 510 Qtls/acre
- SSI crop sold for the seed purpose at premium price.
- Expected yield from ratoon: 600 quintals /Acre

# Shiv Kumar Tyagi

(Bachitti Village, Saharanpur District, UP)



- Seedlings planted: 6600 seedlings in 4 Beeghas (0.66 Acres)
- Spacing: 4 x 2 feet (SSI)
- Variety: CoS 88230
- Yield with traditional method: 240 Qtls/acre
- Yield with SSI: 420 Qtls/acre
- SSI crop sold for the seed purpose at premium price of Rs. 250 per quintal
- Expected yield from Ratoon: 600 quintals/Acre

# Baljinder Singh

Naipura village, (Jansath block, Muzaffarnagar District, Uttar Pradesh)



- Seedlings planted: 15000 in 2.5 Acres
- Spacing: 5 x 2 feet (SSI)
- Variety: Co 238
- Yield with traditional method: 400 Qtls/acre
- Yield with SSI: 500 Qtls/acre
- SSI crop sold for the seed purpose at premium price of Rs. 250 per quintal

# Collaboration with AgSri...3 year Yield Enhancement Programme (YEP) 2011-2014

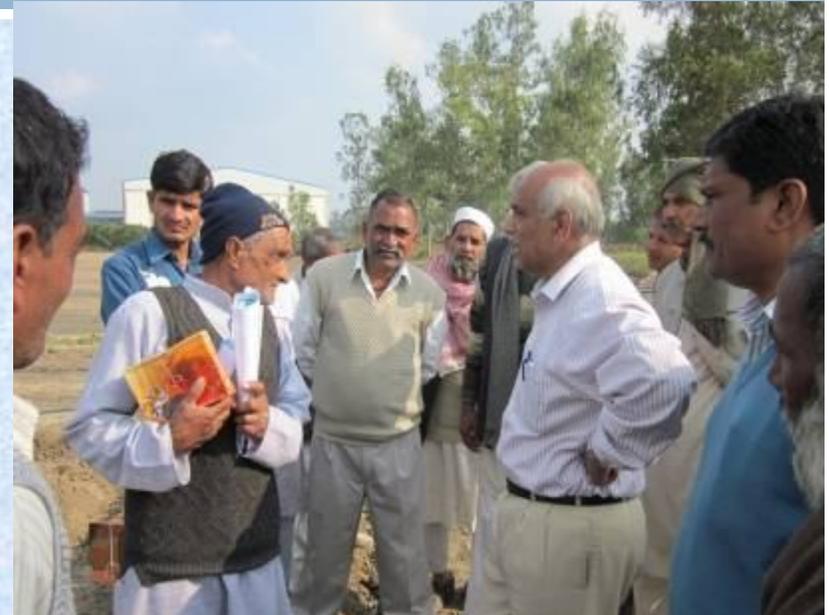
Triveni collaborated with AgSri, Hyderabad for 3 years term with following objectives to:

- Improve the cane yields
- Improving the sugar contents
- Improving the water productivity
- Introduce quality varieties
- Training and capacity building of Triveni team to achieve the above objectives.



# Main Interventions with AgSri support

- Capacity building of farmers and Triveni staff
- Round the year technical supervision and backstopping support to farmers
- Kisan nurseries at backyards
- 600 farmers planted bud chip seedlings in 400 Acres across 7 factories



# Benefits of SSI .....

- Yields as high as 51 t/acre with SSI in UP conditions
- Field mortality less than 5%
- Higher number of millable canes/plant & better quality of canes
- Provides ample opportunities for intercropping
- Significant increase in income of SSI farmers



**Farmers as well as factory excited to upscale SSI in UP.....**

# SSI Ratoons performing quite well....!

- SSI Ratoons are performing extremely well.
- Expected yield 60 tons/acre from majority of the ratoon plots.





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# Md. Ali with his ratoon crop!

Mulawan Village, Muradabad District (UP)



- Seedlings planted: 8000 seedlings in 8 Beeghas (1.33 Acres)
- Spacing: 4 x 2 feet (SSI)
- Variety: CoS 88230
- Yield with traditional method: 240 Qtls/acre
- Yield with SSI: 430 Qtls/acre
- Expected yield from Ratoon: 600 quintals/Acre

# Bud Chip Nurseries....

## *A micro enterprise for farmers!*



- Tungel Singh from Dillari Block, Muradabad district
- No. of Seedlings raised: 58,000
- Self Planting: 8,000
- Seedlings sold: 50,000
- Income from sale of seedlings: Rs. 40,000

## Umrao Singh with his backyard nursery.....



- Umrao Singh from Dariyapur Village (JP Nagar)
- No. of seedlings raised: 35000
- Self planting: 3000
- Sold to other farmers: 32000
- Total income: Rs. 35000
- Cost incurred: Rs. 5000
- Net income from sale of seedlings: Rs. 30000

# Interventions to up scaling SSI

- Working with farmers.
- Training and building new Skill
- Regular backstopping support required
- demonstration at strategic locations (*Seeing is Believing!*)
- Appropriate responses to Extreme cold climate: sprouting problems in  
Bud chip nurseries
- Labour scarcity and appropriate mechanization.
- Incentives & subsidies.

THANK  
YOU

