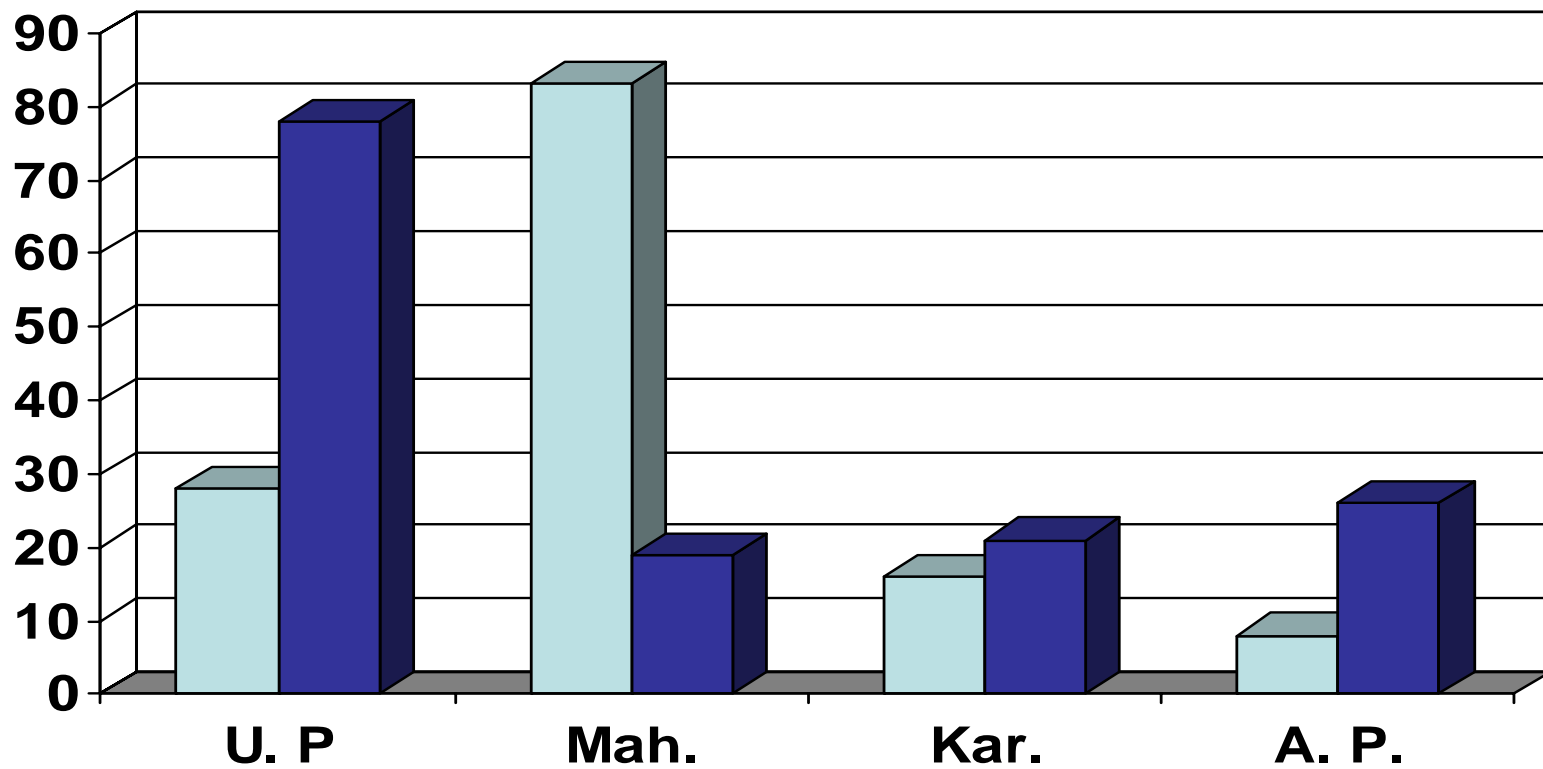


Overview of Sugar Industry in India & it's Allied Network

Anand Deshmukh
Field Researcher
NetPEM Public Trust, Nagpur



Number of Sugar Factories in Operation in Leading Sugar Producing States of India



■ Co-operative

■ Public & Private

State Wise Sugar Production (in '000 Tonnes)

	2000-01	2001-02	2002-03	2003-04	2004-05 (P)
Andhra Pradesh	1022	1048	1210	886	982
North Bihar	288	342	408	274	253
Gujarat	1073	1056	1251	1066	797
Haryana	586	624	636	582	400
Karnataka	1613	1550	1868	1116	1042
Kerla & Goa	23	13	14	10	8
MP & Chhattisgarh	93	71	75	110	82
Maharashtra	6705	5613	6215	3175	2203
Punjab	496	596	587	390	315
T.N. & Pondy	1819	1878	1678	941	1050
Uttar Pradesh	4394	5260	5651	4551	5037
U P Central	1617	1973	1826	1452	1601
U.P East	1114	1462	1980	1399	1601
U P West	1663	1825	1845	1700	1835
Uttranchal		444	498	387	381
Others – Assam, Orissa, Nagaland & West Bengal	40	30	47	48	49
All India	18519	18527	20140	13546	21610

Source : Indian Sugar Magazine July, 2005, published by ISMA



World Sugar Scenario Sugar Production (million Tonnes)

	2001-02	2002-03	2003-04	2004-05	2005-06
Total Africa	8.03	8.53	8.301	8.265	8.265
Cuba	3.6	2.25	2.45	1.3	1.45
Total Central America	3.645	3.801	3.895	4.027	4.052
USA	7.167	7.644	7.847	7.146	6.824
Total North America	12.424	12.927	13.275	13.415	12.919
Brazil	20.4	23.81	26.4	28.175	28.7
Total South America	27.736	31.373	34.234	35.855	36.398
India	20.475	22.14	15.15	14.21	18.43
Total Other Asia	2.448	2.563	2.552	2.348	2.278
Total Asia Oceania	50.198	57.553	49.637	45.017	48.418
EU	16.153	18.675	17.132	21.825	21.233
World Total	134.27	148.656	142.4	140.811	144.151

Source : USDA November, 2005



Sugar Consumption (million Tonnes) Raw Value

	2001-02	2002-03	2003-04	2004-05	2005-06
Total Africa	9.881	10.514	10.378	10.494	10.691
Cuba	0.7	0.7	0.7	0.7	0.7
Total Central America	1.511	1.639	1.558	1.595	1.614
USA	9.028	8.955	8.971	9.269	9.267
Total North America	15.462	15.585	16.002	16.143	16.199
Brazil	9.45	9.75	10.4	10.6	10.8
Total South America	15.78	16.058	16.778	17.069	17.356
India	19.76	19.98	18.81	19.5	19.8
Total Other Asia	8.039	8.177	8.53	8.765	8.888
Total Asia Oceania	51.213	53.423	53.327	54.638	55.548
EU	14.088	14.361	14.358	17.626	17.525
World Total	134.454	138.315	138.649	141.056	142.781

Source : USDA November, 2005

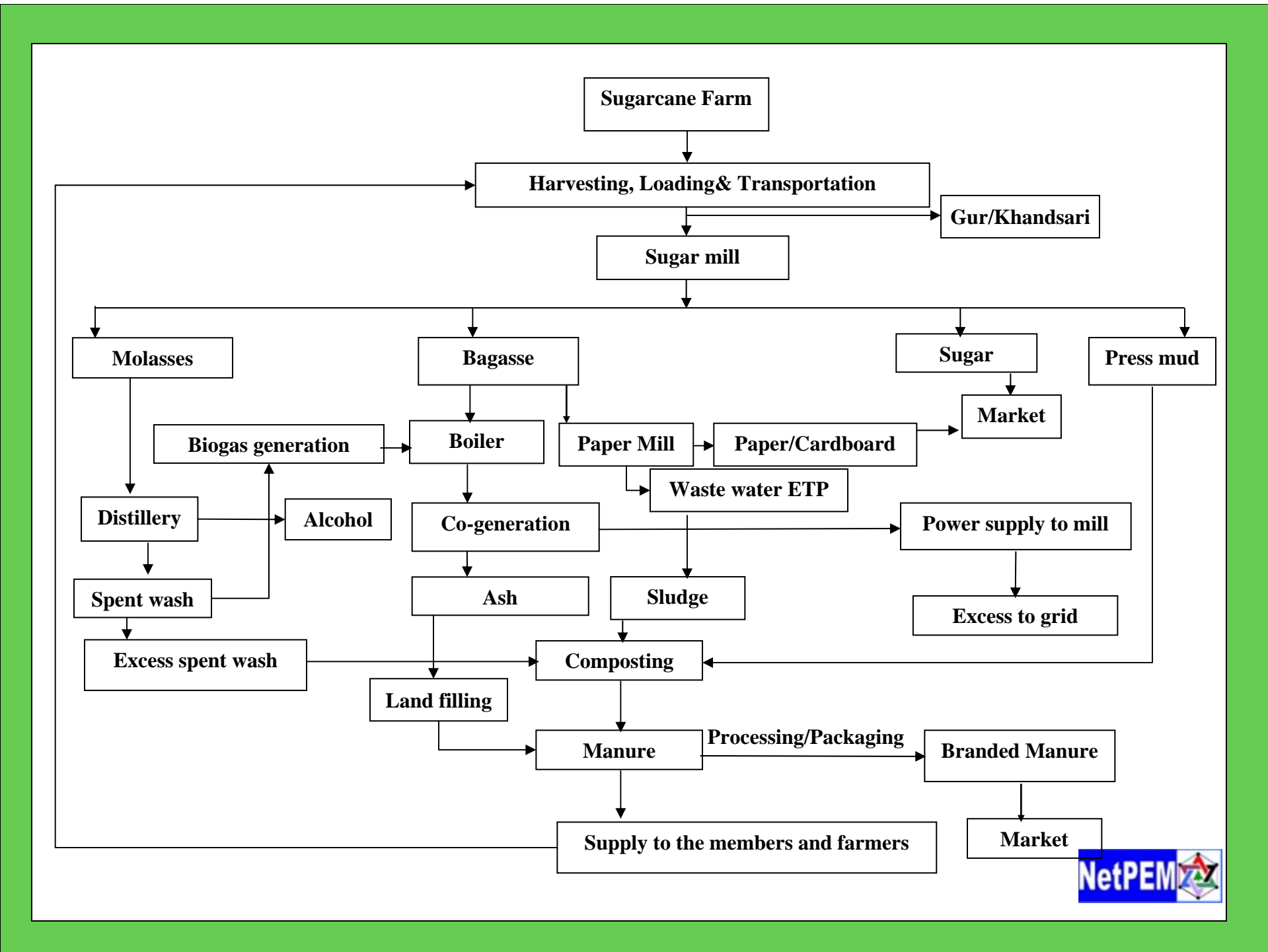


- Sugar industry is the second largest agro-based industry, next to textile in India.
- India is the fourth lowest cost sugar producer in the world after Australia, Brazil and Thailand.
- About 45 million farmers grow sugarcane and 0.5 million agricultural labourers are involved in sugarcane cultivation and other ancillary activities.
- 2% of total crop area is under sugar cane cultivation (4.5 Million Hectares)
- The sugar industry pays well over Rs 100 billion to the sugarcane growers every year for cane.
- It contributes nearly 17 billions towards annual tax contribution to exchequer

Sugar Industry Network

An ideal sugar Network/cluster should comprise of

- Sugarcane farm
- Sugar industry
- Distillery
- Paper or Cardboard Manufacturing unit
- Bagasse based Co-generation plant
- Fertilizer unit



Case Study

Shri. Rajarambapu Co-operative Sugar Industry, Maharashtra, India

Micro-region- Shri. Rajarambapu Co-operative Sugar Industry, Overview

- Working/command area 20 KM radius
- Sugarcane yield- 65-85 Tonnes/Hac.
- No. of villages- 179
- Area of sugarcane- 10,678.86 Hac.
- Sugarcane used for gur and khandsari- 3103.07 Hac.

Production Inputs (Economic)

- Crushing Capacity of sugar Industry- 4200 Tonnes/day
- Total cane crushed- 575892.5 MT
- Production of sugar- 71837.5 MT
- Average recovery- 11%
- Production of rectified spirit- 9309.436 KL
- Quantity of molasses generated- 20150.42 MT

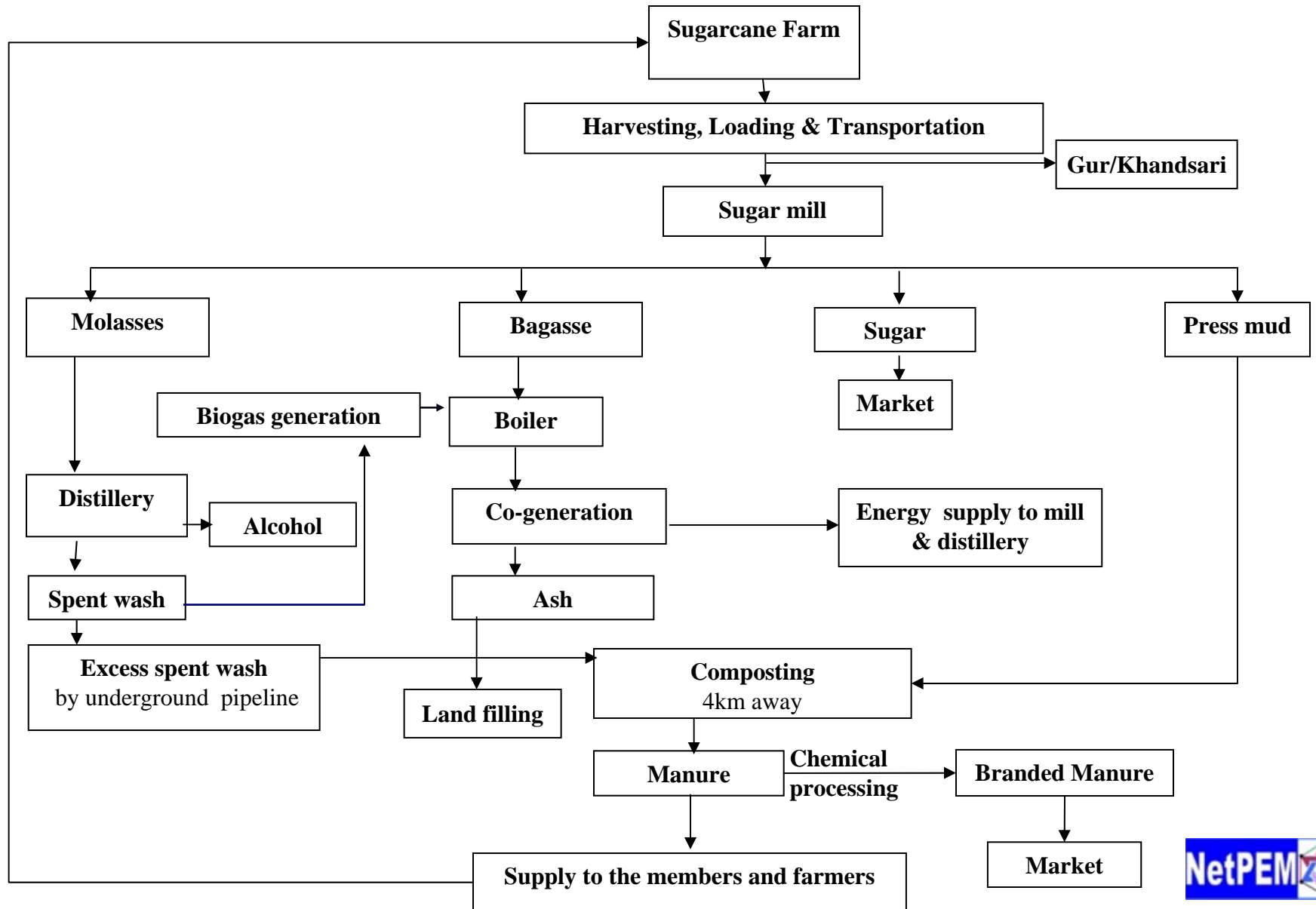
Social Inputs

- Established Engineering collage and School
- Agricultural soil testing laboratory, Nursery
- Medical facility for the community
- Subsidies/Loans for the farmers
- Infrastructure like road, transport etc.

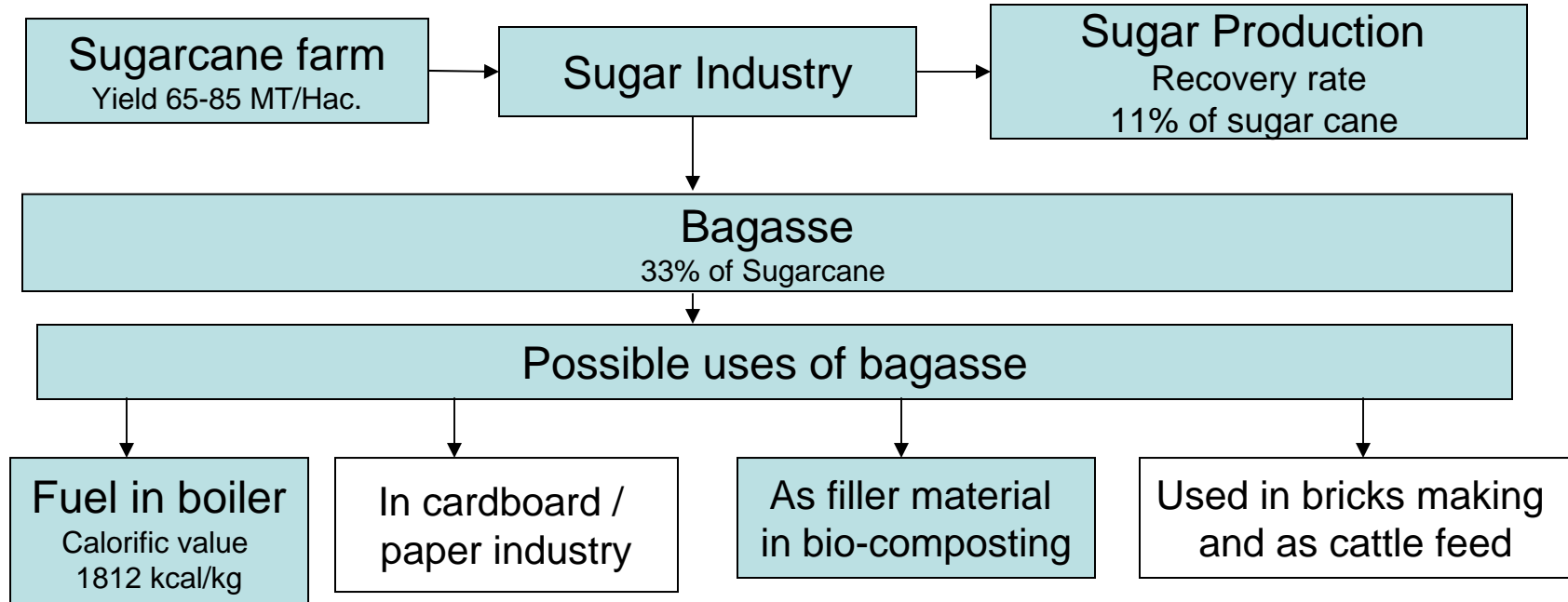
Extended Economic Inputs

- Support services like labour contractor (Provider)
- Harvester and Transporter
- Hardware services
- Supplier of chemicals for the industrial process

Sugar Industry Network of Shri Rajarambapu Co-operative Sugar Industry

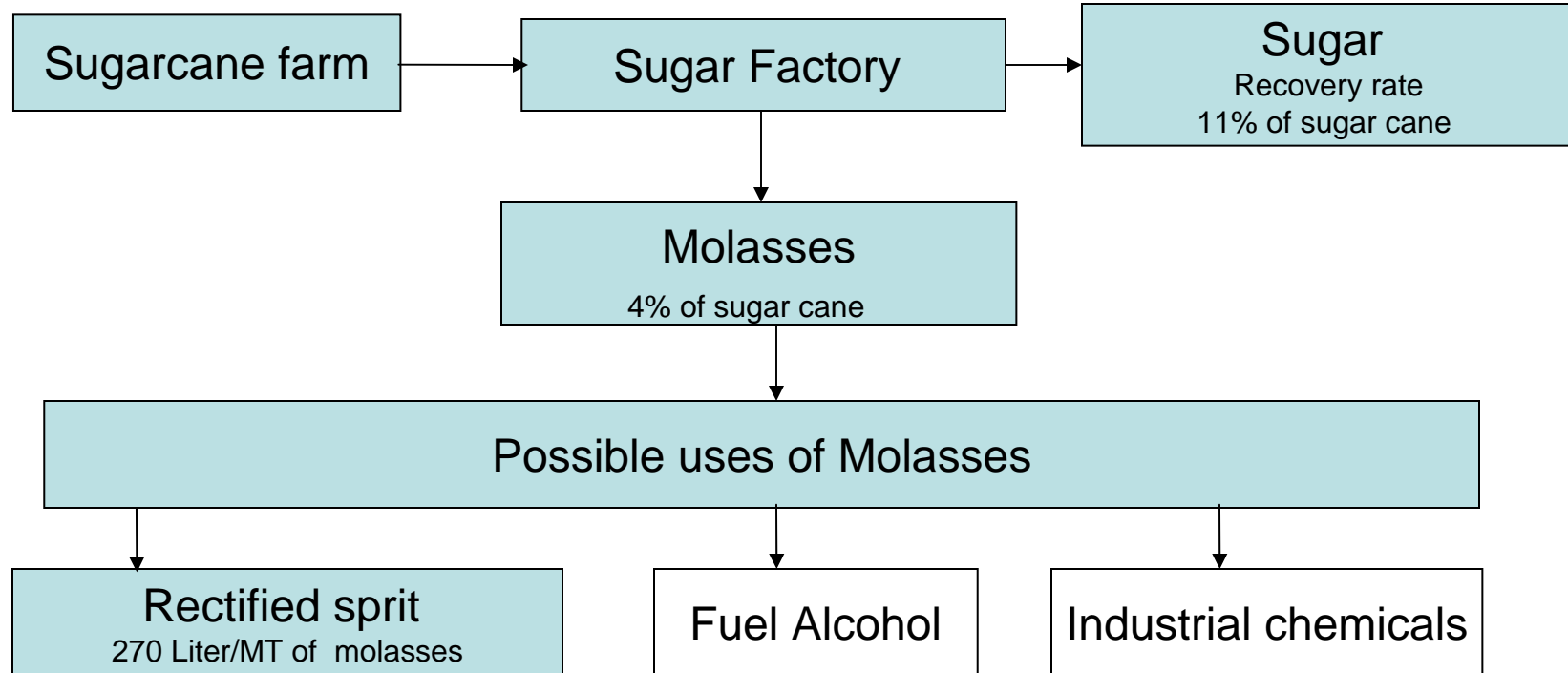


Bagasse



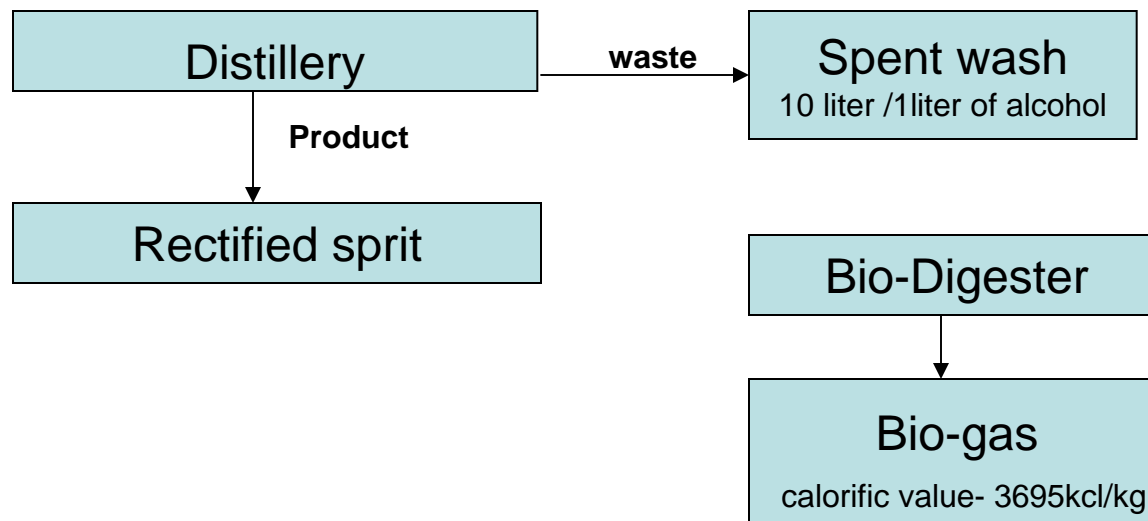
 Presently in practice

Molasses



Presently in practice

Production of rectified sprit



Presently in practice

SWOT analysis of case study

Strengths

- Becomes key economic activity of the working area
- Provides direct and secondary employment to the community
- Supports the other secondary business and service provider
- As cooperative society helps in mobilizing rural resources, transport and communication facility
- Also established schools , colleges and medical facility for the community

Weaknesses

- Lack of professionalism and proper management
- Lack of awareness among the growers
- Old technology
- Low recovery rate

Opportunities

- High value of it's by-product
- Large potential to increase productivity of cane and sugar recovery rate
- Technology up-gradation

Threats

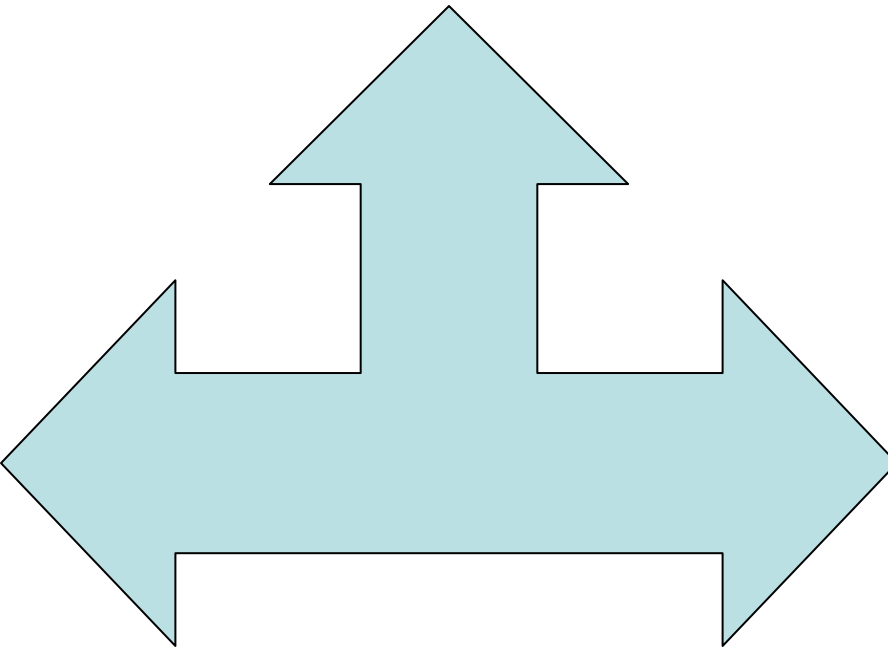
- Unhealthy competition within the members of the society
- Political interest
- Water availability
- Fertility of soil and yield/ha.

Sustainable Sugar Industry should optimally combines the 3Ps

People (society)

Profit (economy)

Planet (environment)



Sustainability Indicators of the Sugar Industry Network

Profit (economical)

- Fair price to the raw material
- Wages & benefits
- Working condition
- Renewability of raw material
- Alternative use of byproduct
- Flexibility to adapt various raw material

People (social)

- Welfare
- Security of jobs in rural areas
- Training / Education
- Employment
- Economic autonomy/control by farmers / rural resident / individuals
- Product affordability to the rural community

Planet (environmental)

- Water conservation and protection
- Soil quality, quantity and conservation
- Energy balance and conservation
- Waste arising and management

Thank You !

Network for Preventive Environmental Management
(NetPEM) Public Trust

3rd floor, Samved Sankul, Temple Road, Civil Lines,
Nagpur-440 001, India

www.netpem.org

