LEAN MANAGEMENT

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OBJECTIVE

In order to mitigate…

a. High cost due to wage increase.

b. Lower NSA due to external uncontrollable market factors

METHODOLOGY USED

CONCEPTS OF **LEAN MANAGEMENT**

CORE IDEA OF LEAN MANAGEMENT

Maximize customer **value**

While minimizing **waste**

LEAN MEANS CREATING MORE VALUE FOR CUSTOMERS USING FEWER RESOURCES

COMMON MISCONCEPTION

a. Eliminating Jobs

b. Doing more with less

WRONG

A lean organization…

understands customer value and focuses its key processes to continuously increase value.

The ultimate goal is …

to provide perfect value to the customer through a value creation process that ultimately has zero waste.

THE EIGHT KINDS OF WASTE

- **Overproduction**

  making more than is immediately needed by the next process or customer.

- **Time**

  waiting due to a lack of parts, watching machines run, etc.

- **Transportation**

  unnecessary moving of things that could be eliminated by better flow

- **Processing**

  unnecessary processing steps that could be eliminated by better design or manufacturing

- **Inventory**
  in excess of immediate needs
- **Motion**
  unnecessary movements that do not add value and waste time and energy of workers
- **Defects**
  mistakes that require inspection, rework or replacement of production
- **Unused creativity**
  failing to use the talents of all employees to solve problems

THE APPROACH TO LEAN IMPLEMENTATION IN THE REGION

High Impact areas for focus was determined as

a) Intake per Plucker

b) Factory Worker Output

c) Electricity Output and

d) Revenue Worker Output

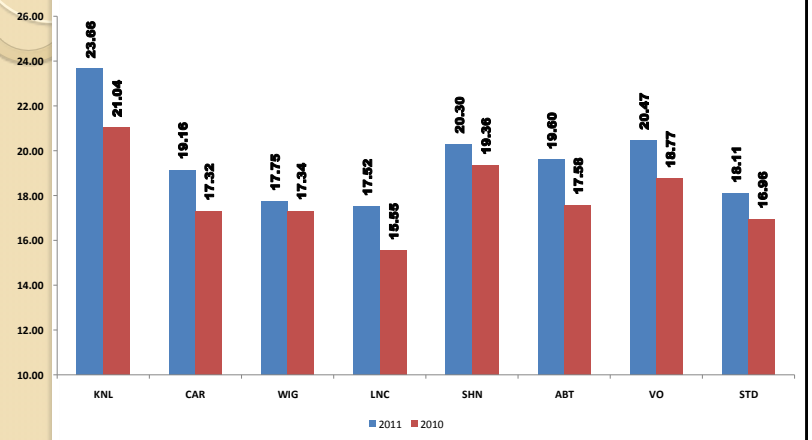
Using the Pareto Principles

WHAT WE DID……

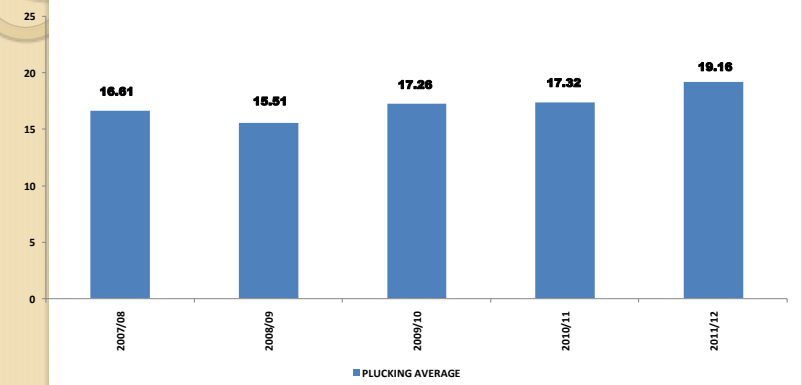
INTAKE PER PLUCKER

1. Elimination of under norms by initially discouraging those bringing in below 14Kgs.
2. Monitoring of weak Pluckers towards performance improvement.
3. Monitoring of Plucking Rounds and Plucker Deployment.
4. Increased use of shears for plucking in meeting worker shortfalls.
5. Encouraged Pluckers to undertake cash plucking (making early payments) and venture to bring in over kilos.
6. Training of Pluckers & Kanganies.
7. Educating Pluckers in respect of required outputs in relation to enhanced wages.
8. Monitoring on particular day's on which poor averages are recorded (funerals, pay days, ceremonies etc) and effect remedial measures.

INTAKE PER PLUCKER 2011 VS 2010



IMPROVEMENT - INTAKE PER PLUCKER
LAST 05 YEARS (CAROLINA ESTATE)



REDUCTION OF BELOW 14 KGS PLUCKERS

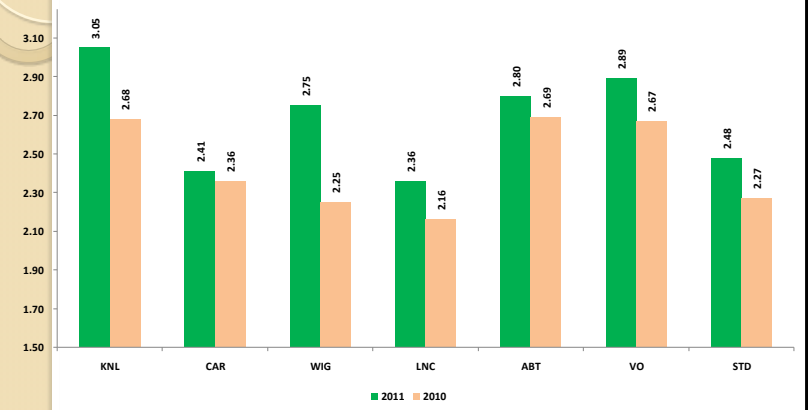
Estate	End 2011	% on Total Pluckers	End 2012	% on Total Pluckers	No. of Pluckers reduced	Reduction of below 14Kgs Pluckers
KENILWORTH	2647	4%	499	1%	**2148**	3%
CAROLINA	6484	10%	1213	2%	**5271**	8%
WIGTON	11717	25%	1563	3%	**10154**	22%
LONACH	18842	50%	9084	27%	**9758**	23%
SHANNON	5415	10%	3360	7%	**2055**	3%
ABBOTSLEIGH	15510	15%	6844	7%	**8666**	8%
DICKOYA	18958	18%	12625	13%	**6333**	5%
VELLAIOYA	30127	22%	7934	6%	**22193**	16%
STRATHDON	29915	28%	8955	9%	**20960**	19%
TOTAL	139615	19%	52077	8%	**87538**	11%

WHAT WE DID……

REVENUE LABOUR OUTPUT

1. Closer monitoring of field work and undertaking work on contract basis (being cheaper) and mechanization (pruning machines, motorized sprayers, shears, etc.) wherever possible.
2. Focused on improving Plucker intakes and deploying men on plucking.
3. Close supervision to achieve enhanced tasks and utilizing workers productively.
4. Providing required tools and materials in order to improve worker output – motorized equipment etc.
5. Motivate the workers through regular discussions and by addressing their grievances (Initiatives by NGOs).

REVENUE LABOUR OUTPUT (2011 VS 2010)



SAVINGS ON COST OF PRODUCTION GIVING WEIGHTAGE TO WAGE INCREASE

Estate	2010/11	Labor Cost - 70% (Rs/cts.)	2011/12	Labor Cost (Assumption)(Rs/cts.)	Real Labor Cost (Base year 2011) (Rs/cts.)	Cost Reduction Per Kg (Rs/cts.)
KENILWORTH	361.51	253.06	360.21	252.15	196.99	56.07
CAROLINA	330.50	231.35	371.71	260.20	203.28	28.07
WIGTON	434.87	304.41	470.03	329.02	257.05	47.36
LONACH	492.22	344.55	575.49	402.84	314.72	29.83
SHANNON	364.76	255.33	402.31	281.62	220.01	35.32
ABBOTSLEIGH	324.69	227.28	318.52	222.96	174.19	53.09
DICKOYA	364.69	255.28	393.7	275.59	215.30	39.98
VELLAIOYA	351.05	245.74	387.75	271.43	212.05	33.68
STRATHDON	365.69	255.98	377.99	264.59	206.71	49.27
Labour Wage in 2010/11			**Rs 447.00**			
Labour Wage in 2011/12			**Rs 572.00**			

WHAT WE DID……

FACTORY LABOUR OUTPUT

1. Critically analyzing the factory working hours and deploying workers on a shift basis.
2. Assessing reasons for additional overtime payments and effecting controls. (Streamlining operations, reducing machinery breakdowns etc. as would be applicable).
3. Close monitoring of worker deployment during meal breaks and reducing the deployment of additional workers to cover the time period.
4. Planned deployment of workers to machinery.
5. Questioned all human activity that consumed man hours and eliminated that which was seen wasteful.
6. Installation of Conveyers as was possible (both financially and practically).
7. Timely attention to Machinery Repairs.

WHAT WE DID……

ELECTRICITY OUTPUT

1. Switching on lights only when required through sensors and closely monitoring the No. of lighting points - reducing wherever possible.
2. Conducting energy audits and taking remedial action.
3. Individual switches for each lighting point as was possible.
4. Promptly switching off Idling machines.
5. Usage of Energy Saving Bulbs.
6. Using of New Motors instead of Rewinding motors.
7. Using Capacitor Banks and ensuring regular checks and servicing in maintaining efficiencies.
8. Using of VSD Fans in troughs.
9. Maximize machinery output avoiding the under utilization of machinery.

SAVINGS IN ELECTRICITY EXPENDITURE VELLAIOYA ESTATE

	Unit of Measurement	Before	After
KVA	Units per month	226	175
Output	Kilos per unit	1.10	1.48
Cost per Kg.	Rs/Cts.	13.20	11.77

MECHANICAL ARM FIXED TO ROTORVANE STRATHDON ESTATE

SAVINGS BY FIXING MECHANICAL ARM TO THE ROTORVANE

1. No additional cost involved
2. No additional power used to work this arm
3. Even pressure build up inside the Rotorvane
4. No accidental threats
5. Two Associates could be saved per day Rs.572/- X 2 = Rs.1144/- (Plus other benefits)

PURPOSE, PROCESS, PEOPLE

MANAGERS AND EXECUTIVES EMBARKING ON LEAN TRANSFORMATIONS THINK ABOUT THREE FUNDAMENTAL BUSINESS ISSUES THAT SHOULD GUIDE THE TRANSFORMATION OF THE *ENTIRE ORGANIZATION:*

PURPOSE

What customer problems will the enterprise solve to achieve its own purpose of prospering?

PROCESS

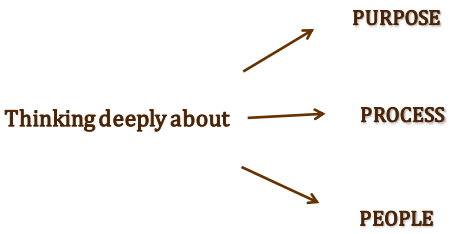
How will the organization assess each major value stream to make sure each step is valuable, capable, available, adequate, flexible, and that all the steps are linked by flow, pull, and leveling?

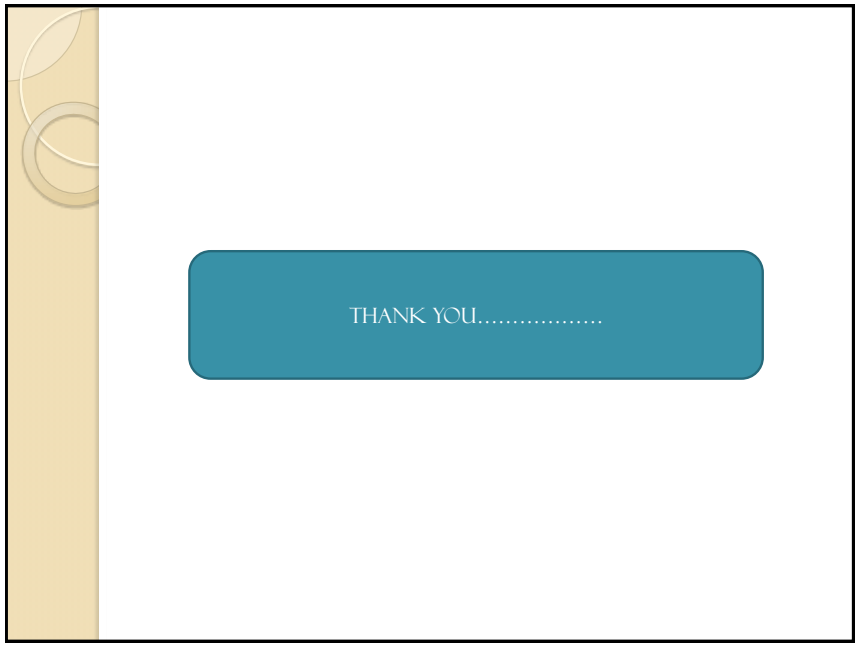
PEOPLE

How can the organization insure that every important process has someone responsible for continually evaluating that value stream in terms of business purpose and lean process? How can everyone touching the value stream be actively engaged in operating it correctly and continually improving it?

"Just as a carpenter needs a vision of what to build in order to get the full benefit of a hammer...

"Lean Thinkers need a vision before picking up lean tools,




THANK YOU.....