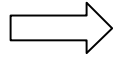


# **Several specific case studies in Vietnam 2007 - 2008**

# Reduce wrong thickness tanned leather by increasing supervision of splitting and plane process in Lieu Xa ward, Hung Yen province, VN

## Problems and causes

High tanned leather not enough thickness because unclear communication between owner – sub contractor – workers and lack of supervision of splitting and plane process

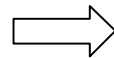


- 2,5% tanned leather selling with 13.3% lower price
- Not enough product for delivery on time
- Increase stock can not sell



## Measures

- Combine writing and talking when giving requirement to sub-contractor and workers
- Give regulation self-control of thickness and more supervision from owner
- Incentive to good workers



Decrease 70 % unqualified tanned leather

## Economic benefits

- Additional cost/year: 90 USD
- Net saving/year: 416 USD
- Investment cost: 0
- Payback period: Immediately

## Environmental benefits

Reduce solid waste leather from plane process

## Organizational benefits

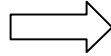
- Delivery on time, customer satisfaction
- Sell leather with right price
- Avoid risk of stock cannot sell

## Worker motivation

- Increase responsibility of plane workers
- Workers more motivated thanks to incentives

## Problems and causes:

Waste clay makes the drying ground dirty and high percentage of bending products, shape of tiles are not perfect

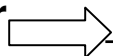


- Clay waste by 10%
- Spend workload on cleaning drying yard
- 3% of bending tiles (reduce the price from 1500VND to 400VND/one)



## Measures:

- Hiring 1 more worker for cutting waste clay  
 - Improve the supervising activities on drying, handling green tiles to firing kilns



- Recover clay waste by 10%
- Reduce workload on cleaning
- Improve the product quality increasing the price by 100VND/piece
- Reduce the bending tiles by 50%

## Economic benefits:

- Additional cost/year: 614.5 USD
- Net saving/year: 1,548USD
- Investment cost: None
- Payback period: Immediately

## Environmental benefits:

Less waste releasing

## Organizational benefits:

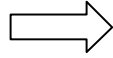
- Optimise the natural resource (clay)
- Enhance its prestige
- Less spend labour capacity on cleaning of drying ground

## Worker motivation

- Sensitization of work staffs about spirit in better working condition

## Problems and causes:

Degrade the powder quality because of bad storage conditions

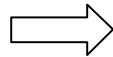


- Out – put decrease by 5%
- Spend more cost on chemical treatment
- Degraded powder cause pollution



## Measures:

- Establish new pools with plastic for preservation of fresh powder
- Apply the « First in – First out » for its lakes



- Increase its productivity by 3%
- Less used chemical substances

## Economic benefits:

- Additional cost/year: 1,075 USD
- Net saving/year: 3,023 USD
- Investment cost: 1,807 USD
- Payback period: 7 months

## Environmental benefits:

- Less fermented powder loss
- Less chemical substances releasing by waste water

## Organizational benefits:

- Enhance the sanitary of foodstuff
- Enhance its prestige
- Less labour for low – quality powder handling

## Workplace Safety and Health Protection Benefits

- Reduce the workers' contact with chemicals

### Problems and causes

High percentage of short vermicelli because lack of heat from boiler, over-dried, and too blunt comb spare part



- 2.5% short vermicelli must sell lower price 30%



### Kinh tế:

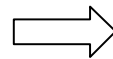
- Chi phí bổ sung: 1.150.000 đ/năm
- Tiết kiệm ròng: 24.050.000 đ/năm
- Chi phí đầu tư: 0
- Thời gian hoàn vốn: Ngay lập tức

### Môi Trường:

- Giảm lượng miến vụn rơi vãi ra môi trường
- Giảm khí sulfur trong than xấu

### Biện pháp:

- increase supervision production process
- Change comb spare parts of sliding device in time
- Select good coal to make sure the heat of boiler
- Regularly maintenance oven

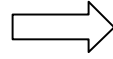


- Decrease 70% of short vermicelli
- Reduce 20% coal for boiler

### Tổ chức:

- Nhân viên thao tác dễ dàng hơn
- Tăng cường ý thức trách nhiệm của công nhân
- Nâng cao hiệu quả làm việc của cơ sở

**Problems and causes:**  
High material consumption (loss) in inventory and grinding process



- Large amount of material loss (15%)
- Releasing dust causing by powder loss (0.5%) which affect much on work staffs health and environment



### **Economic benefits:**

- Additional cost/year: None
- Net saving/year: 1,024 USD
- Investment cost: None
- Payback period: Immediately

### **Environmental benefits:**

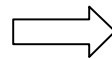
- Less dust releasing

### **Organizational benefits:**

- Enhance its prestige
- Assume its responsibility for work staffs

### **Measures:**

- Check the dry level of its root, bark etc.
- Replace the material (fabric) of grinder ( thicker )



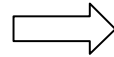
- Reduce the raw material loss to 10%
- Decrease the loss of powder by 80%

### **Workplace Safety and Health Protection Benefits**

Sensitization of work staffs about improving dust in working place

## Problems

- A big amount of incense powder waste contaminated or wet.



High costs  
Low productivity



## Economic benefits:

- Additional cost/year: 42 USD
- Net saving/year: 457 USD
- Investment cost: None
- Payback period: Immediately

## Environmental benefits:

- Less solid waste releasing

## Organizational benefits :

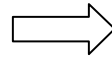
- Improve workers' responsibility
- Workers more loyal to the enterprise

## Worker motivation

Better relationship between owner and workers thanks to motivation

## Measures:

- Assign workers to keep the drying yard tidy to collect powder waste
- Incentives for workers who collect powder waste at working place
- Recycle powder waste soon to assure the quality

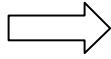


- Collect and recycle 50% incense powder waste

## Problem:

### In drying season power cut

Do điện tại làng nghề bị cắt đột xuất vào những tháng mùa khô nên bột hương đã được nhào thường bị hư hỏng, cơ sở phải tận dụng để làm hương loại 2

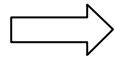


- Hương loại 2 có giá trị chỉ bằng 50% so với hương loại 1



## Biện pháp:

-Mua máy phát điện 5Kw/h để sử dụng trong khi bị cúp điện đột xuất



- Chủ động hơn trong sản xuất  
- Giảm 100% bột hương đã được nhào bị hư hỏng

## Kinh tế:

- Chi phí bổ sung: 1.032.000 đ/năm
- Tiết kiệm ròng: 4.008.000 đ/năm
- Chi phí đầu tư: 7.500.000 đ
- Thời gian hoàn vốn: 18 tháng

## Tổ chức:

- Chủ động trong sản xuất
- Giao hàng đúng hẹn, giữ chữ tín với khách hàng

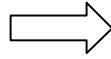
## Động lực làm việc của công nhân:

Công nhân chủ động hơn về thời gian và bố trí, sắp xếp công việc



### Problems

- Large amount of energy consumption (electric), around 576.000 kwh/year

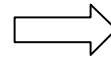


- High energy consumption (electric) , around 576millions VND/year
- Reduce the local productivity (electric)



### Measures:

- Decrease 10 sticks of machine, and replace by 1 conveyor (2Kwh) (30 millions/one)



- Less 25% electrical fees
- Less loading capacity on local electric network

### Economic benefits:

- Additional cost/year : 239 USD
- Net saving/year: 7,807 USD
- Investment cost: 3614 USD
- Payback period: 6 months

### Environmental benefits:

- Less energy consumption (electric)

### Organizational benefits:

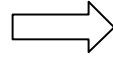
- Sensitization of work staffs about improving efficiency
- Enhance the sensitization of work staff about improving efficiency
- Enhance its imagines on environmental protection

### Workplace Safety and Health Protection Benefits

- Easy understand operation
- Better working environment

## Problems and Causes

- The enterprise has skilled labour and reputation
- The workshop is old, un appropriate layout , low productivity

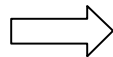


- Not utilize all the oven capacity
- High gas consumption
- Low and dank production area effects the bakery preservation



## Measures

- Repair the premise
- Reorganize production layout



- Increase productivity 25%
- Longer products preservation
- Reduce 10% gas consumption

## Economic benefits

- Additional cost/year: 0
- Net saving/year: 749 USD
- Investment cost: 904 USD
- Payback period: 14.5 months

## Environmental benefits

Natural resource efficiently used

## Organizational benefits

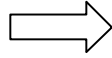
- Fulfil food safety requirements
- Increase customers' trust

## Worker motivation

More comfortable working condition, easier manner

## Problems and Causes:

The owner and workers are skilled but the workshop is too old, bad hygiene, a lot of machineries which not being appropriate layout, untidy stock of spare parts



- Low productivity
- Low workers' income
- Unsatisfied clients because of long delivery

## Economic benefits:

- Additional cost/year: 0
- Net saving/year: 607 USD
- Investment cost: 0
- Payback period: Immediately

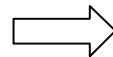


## Organizational benefits:

- Workers actively create the more comfortable working environment
- Improve the shop's image
- Higher labour efficiency
- Increasing clients' satisfaction

## Measures:

- Clean up whole workshop
- Reorganize layout
- Rearrange stock of spare parts
- Give instruction of timely clean the workshop



- Increase productivity 20%
- Reduce repairing time, shorter delivery

## Worker motivation:

High motivation thanks to increasing income