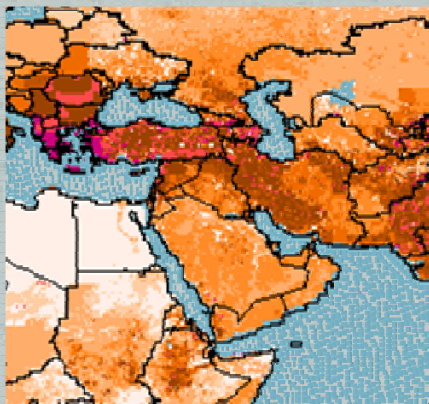


# Meat Experiences

## of the Economics of Setting up Meat Plants in the Middle East



by  
Edwin Bowater  
of  
FJB Systems



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# FJB



# Agenda

About FJB Systems

Overview of the Middle Eastern Meat Industry

Overview of the Business Planning Tool

Case Study

Summary





# FJB Systems

## One-stop Service for the Meat Industry

**FJB Systems**  
M.E. Overview  
Business Tool  
Case Study  
Summary

- Feasibility Studies/Business Planning
- Process Layouts
- Architecture
- Building Design
- Project Management
- Training, Commissioning & Management
- M & E Design
- Refrigeration
- Insulation

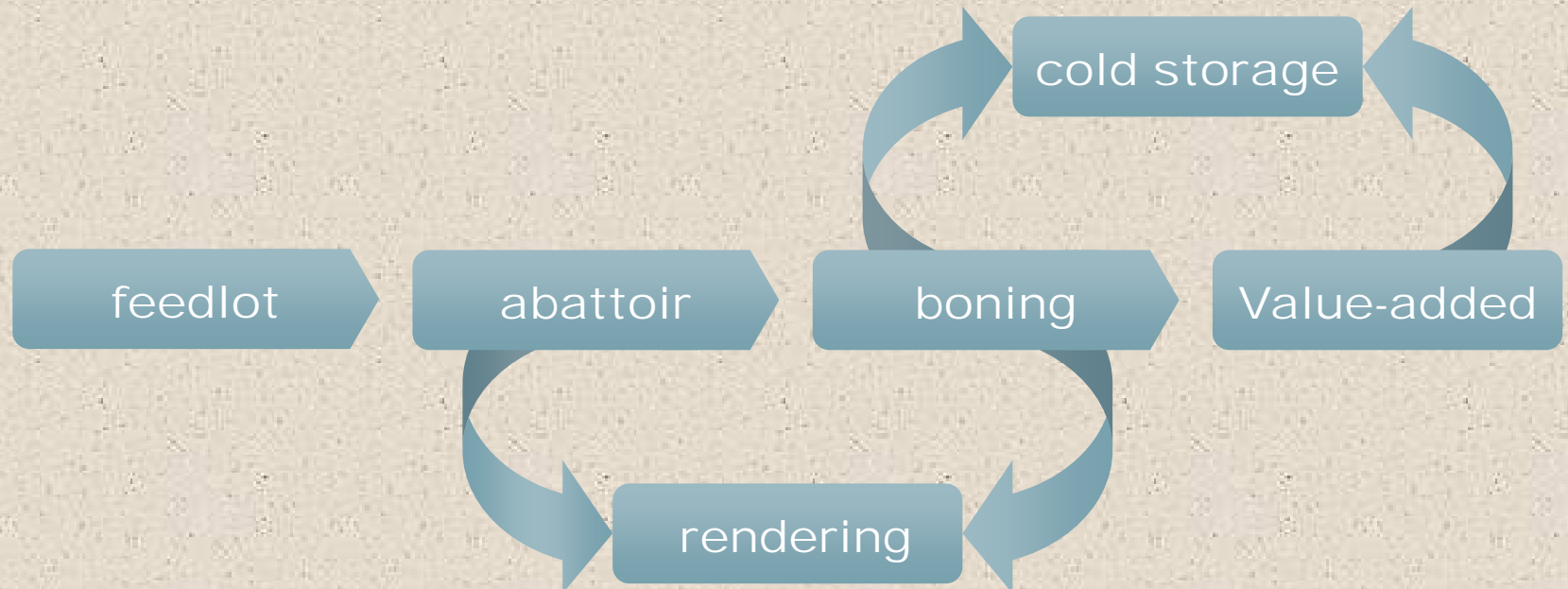




# FJB Systems

**FJB Systems**  
M.E. Overview  
Business Tool  
Case Study  
Summary

- Fields of Expertise - Beef, Sheep, Pork & Poultry
- Experience in slaughtering, boning, value-adding, rendering, canning & cold storage



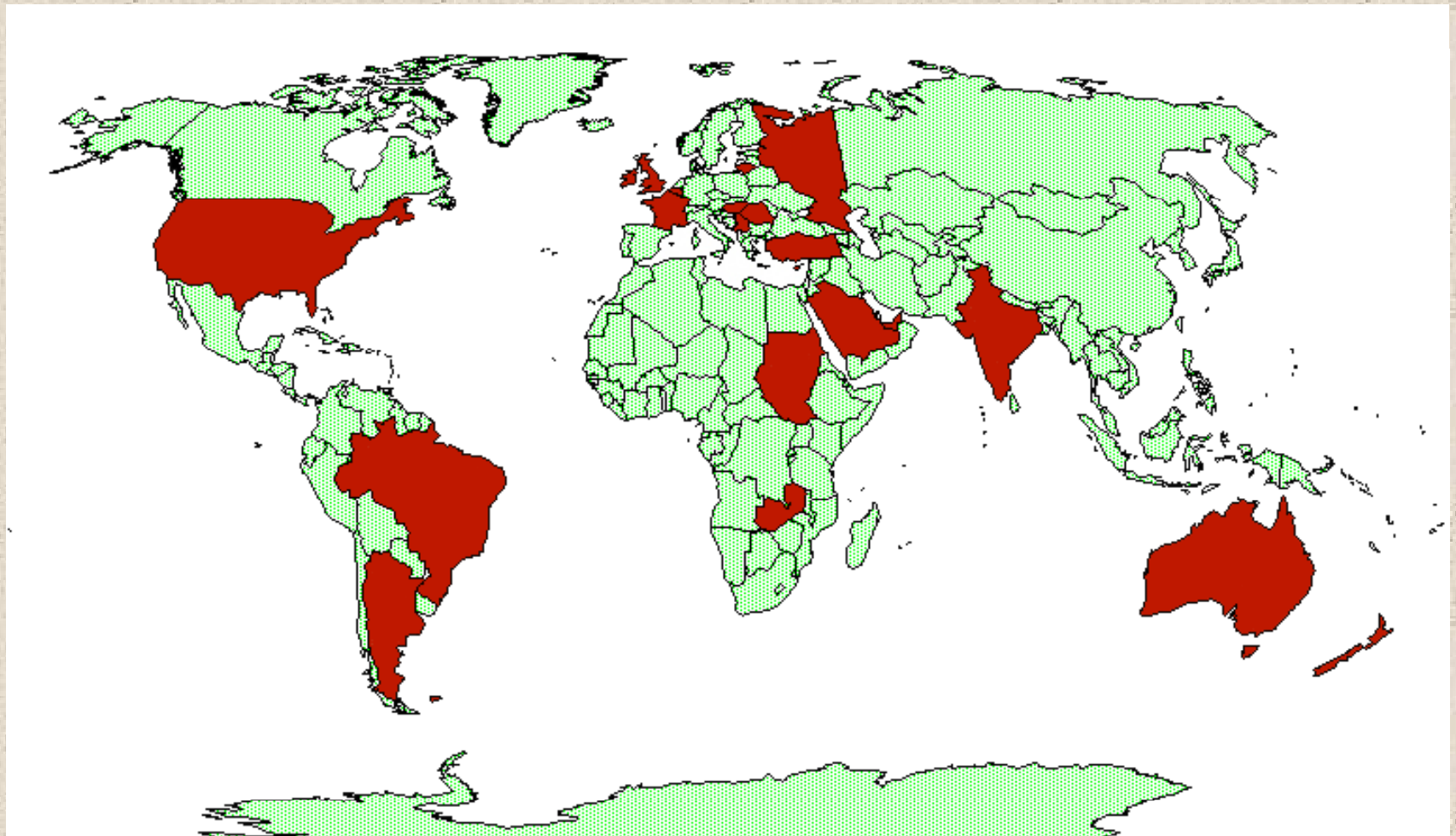




# FJB Systems

## Worldwide Experience

**FJB Systems**  
M.E. Overview  
Business Tool  
Case Study  
Summary





# Middle Eastern Overview

FJB Systems  
M.E. Overview  
Business Tool  
Case Study  
Summary

- Sheepmeat - preferred protein
- Increasing Oil Wealth since 1973
- Preference for fresh meat → Live Imports
- Australia & New Zealand
- Increasing personal wealth: Mutton → Lamb
- High quality gas flushed product
- Still large preference for fresh meat

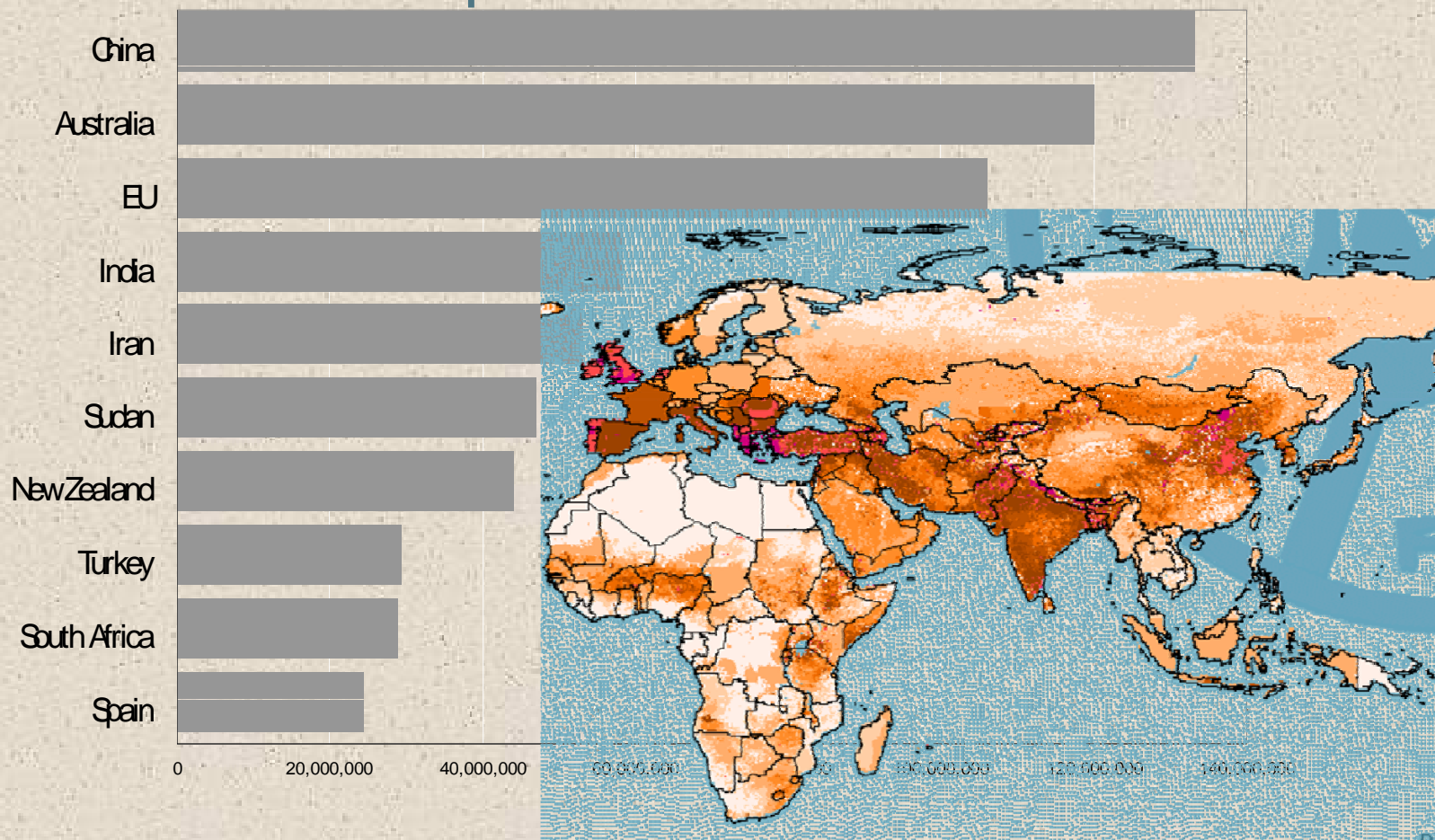




# Middle Eastern Overview

FJB Systems  
M.E. Overview  
Business Tool  
Case Study  
Summary

## World Sheep Inventories





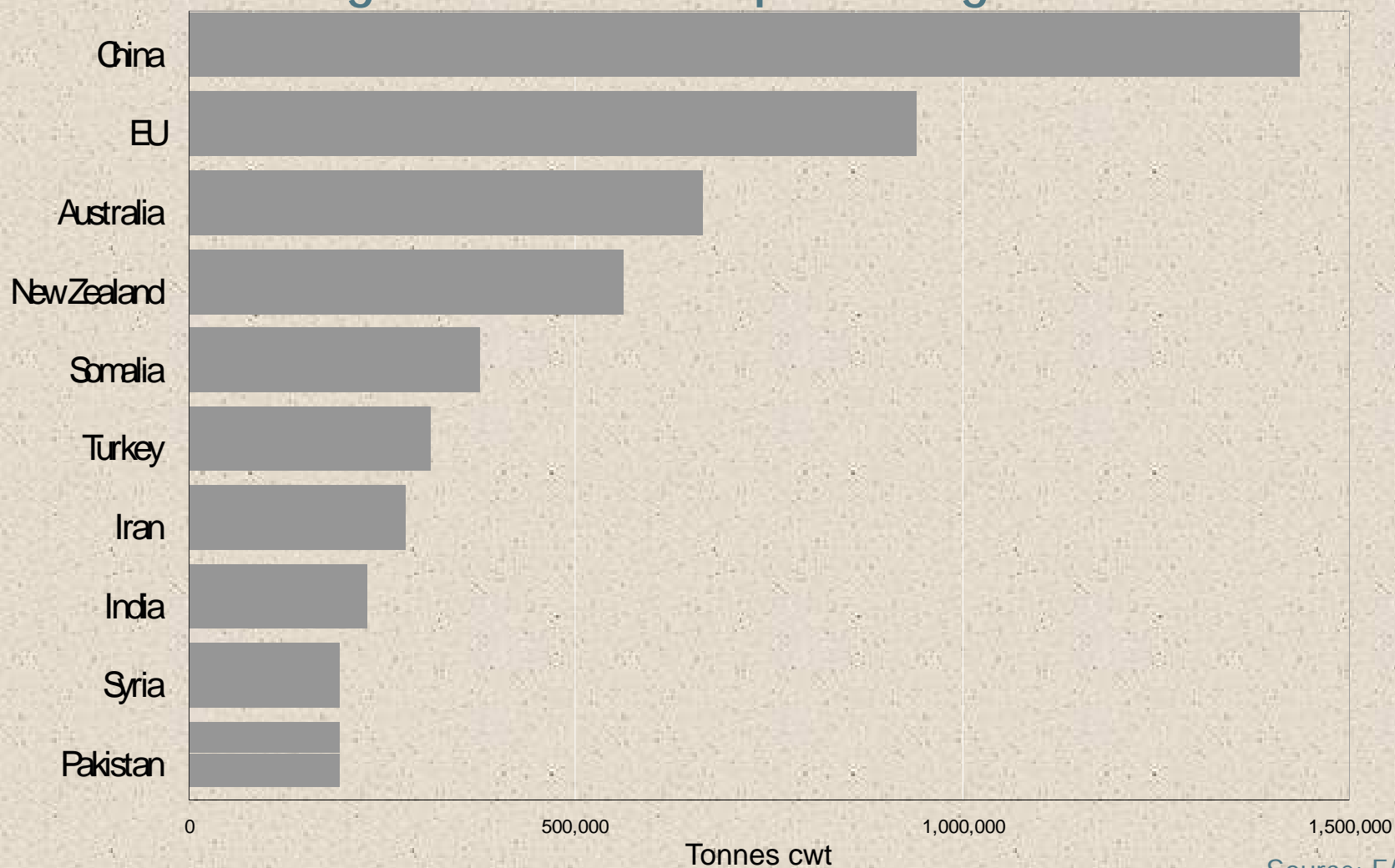


# Middle Eastern Overview

FJB Systems  
M.E. Overview  
Business Tool  
Case Study  
Summary



## Leading Lamb & Mutton producing Countries



Source: FAO





# Business Tool

FJB Systems  
M.E. Overview  
**Business Tool**  
Case Study  
Summary

- Powerful computerised business tool
- Models existing or proposed businesses via computer spreadsheets
- Model based on real operational experience
- Allows “What If” scenarios to be instantly tested
- Identifies sensitivities/weaknesses of a business
- Is the proposed or existing business viable?





# Case Study

FJB Systems  
M.E. Overview  
Business Tool  
**Case Study**  
Summary

- Proposed New Middle Eastern Slaughter & Rendering Plant to replace existing - 2000 Head Sheep/Day & 50 Cattle/Camels
- Private Operation





# Case Study

FJB Systems  
M.E. Overview  
Business Tool  
**Case Study**  
Summary

## Example of Middle Eastern Public Slaughterhouse



*Note: Not built to International Standards*



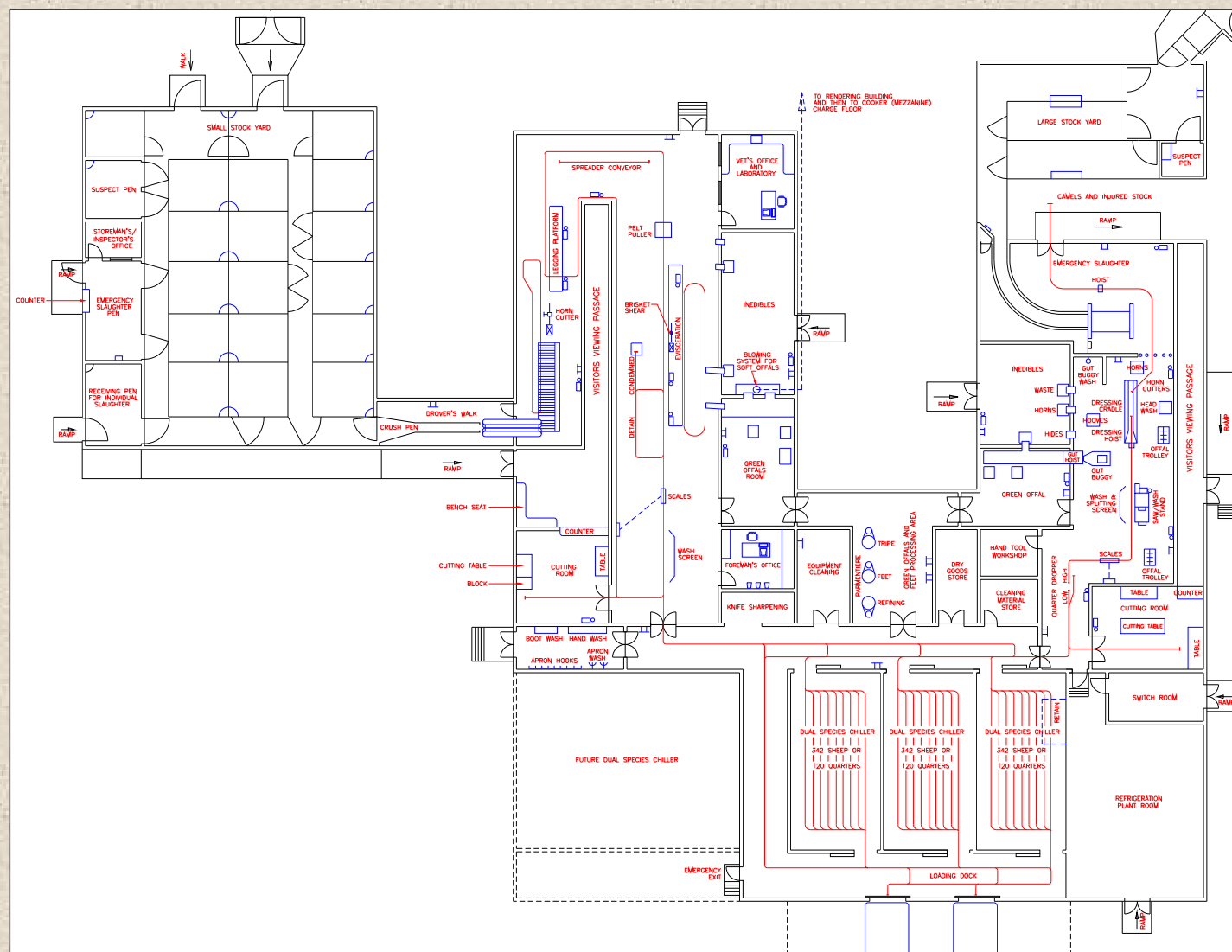




# Case Study

## FJB Systems M.E. Overview Business Tool Case Study Summary

### Dual Purpose Low Throughput Public/Private Slaughterhouse





# Case Study

FJB Systems  
M.E. Overview  
Business Tool  
**Case Study**  
Summary

- Proposed New Middle Eastern Slaughter & Rendering Plant to replace existing - 2000 Head/Sheep Day & 50 Cattle/Camels
- Importing Live Sheep
- Monthly Animal Shipments
- Feedlot Requirement
- Built to USDA & EU Standards
- Will it make money?
- What are the business weaknesses?



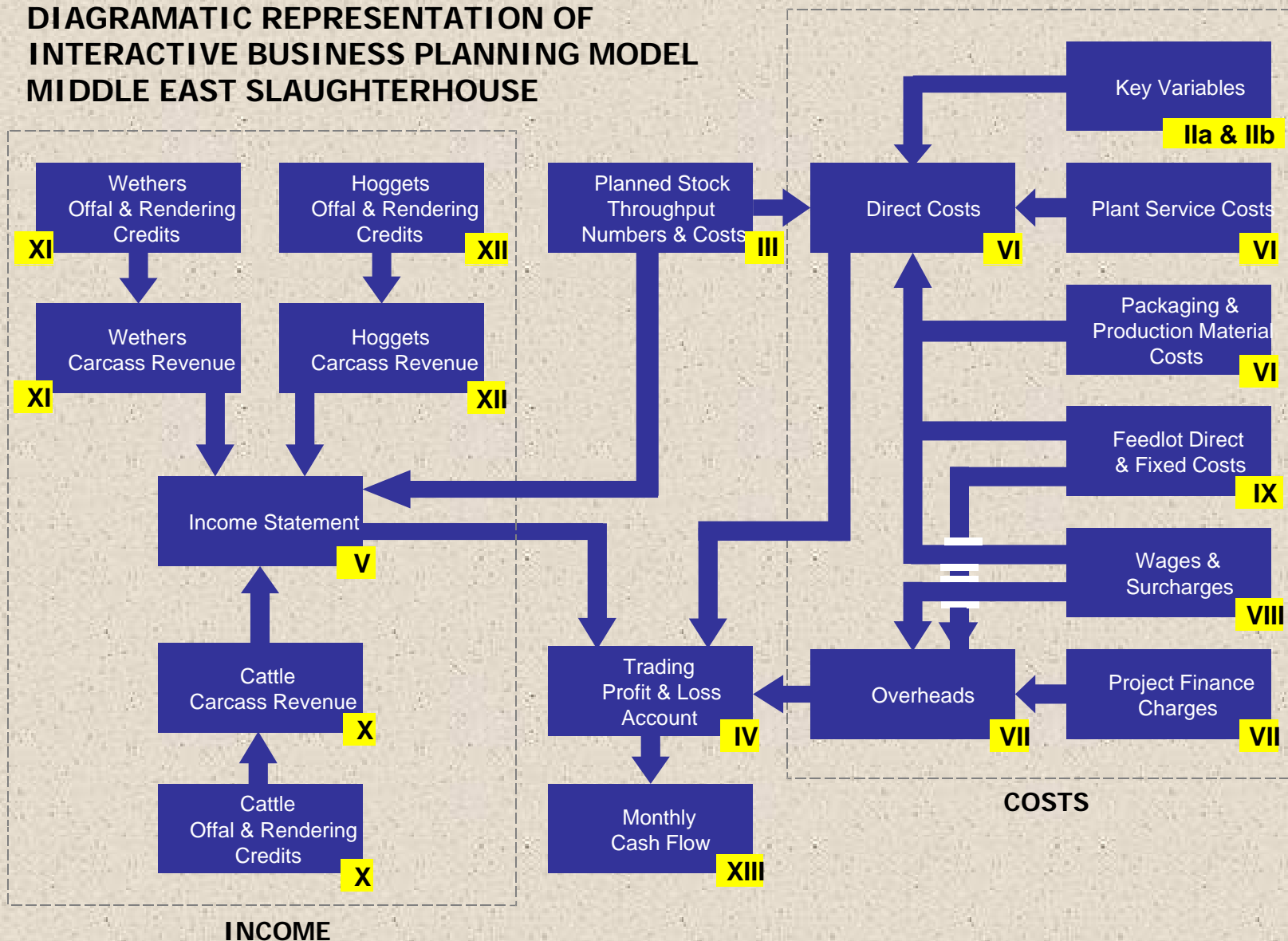


# Case Study

FJB Systems  
M.E. Overview  
Business Tool  
**Case Study**  
Summary



## DIAGRAMATIC REPRESENTATION OF INTERACTIVE BUSINESS PLANNING MODEL MIDDLE EAST SLAUGHTERHOUSE







# Case Study

FJB Systems  
M.E. Overview  
Business Tool  
**Case Study**  
Summary

Model includes over 100 separate variables which can be independently changed - illustrated by these examples:

Livestock Purchase Price:	27	A\$/head (FAS Western Australia)
Exchange Rate:	0.585	US\$/A\$
Throughput:	2000	Sheep/day
Average Local Feed Prices:	235	US\$/tonne
Dressing Yield:	44	%
Employee Wage Rates:	15	US\$/day
Meat Prices:	100	%

Base Profitability is calculated at  
US\$1.61m (year 8) incl. Deprec.





# Case Study

FJB Systems  
M.E. Overview  
Business Tool  
**Case Study**  
Summary

Assume 10% increase in Livestock Purchase Price

Livestock Purchase Price:	30	A\$/head (FAS Western Australia)
Exchange Rate:	0.585	US\$/A\$
Throughput:	2000	Sheep/day
Average Local Feed Prices:	235	US\$/tonne
Dressing Yield:	44	%
Employee Wage Rates:	15	US\$/day
Meat Prices:	100	%



*and process the results ....*

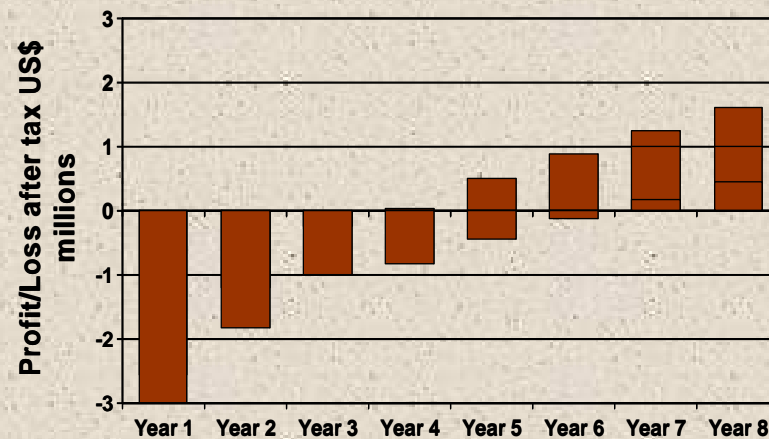


# Case Study

FJB Systems  
M.E. Overview  
Business Tool  
**Case Study**  
Summary

US \$1.61 million → Adjusted profit US \$0.45 m  
10% ↑ livestock price → 72% ↓ profit

Profit & Loss Statement







# Case Study

FJB Systems  
M.E. Overview  
Business Tool  
**Case Study**  
Summary

Assume 10% decrease in Exchange Rate

Livestock Purchase Price:	27	A\$/head (FAS Western Australia)
Exchange Rate:	0.526	US\$/A\$
Throughput:	2000	Sheep/day
Average Local Feed Prices:	235	US\$/tonne
Dressing Yield:	44	%
Employee Wage Rates:	15	US\$/day
Meat Prices:	100	%



*and process the results ....*

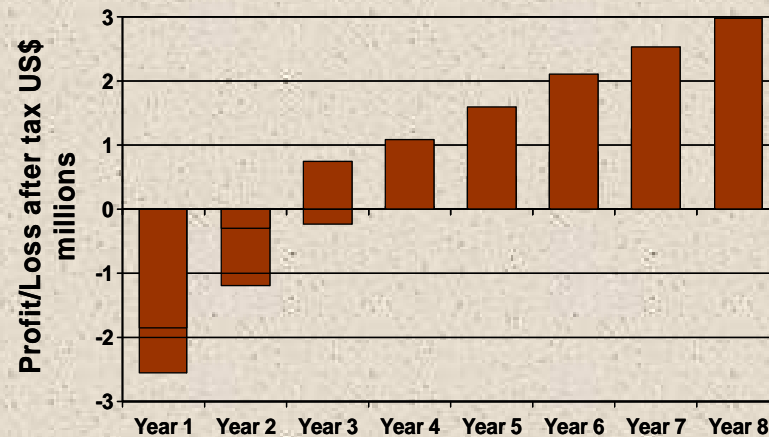


# Case Study

FJB Systems  
M.E. Overview  
Business Tool  
**Case Study**  
Summary

US \$1.61 million → Adjusted profit US \$3 million  
10% ↓ exchange rate → 86% ↑ profit

Profit & Loss Statement





# Case Study

FJB Systems  
M.E. Overview  
Business Tool  
**Case Study**  
Summary

Assume 10% increase in Throughput

Livestock Purchase Price:	27	A\$/head (FAS Western Australia)
Exchange Rate:	0.585	US\$/A\$
Throughput:	2200	Sheep/day
Average Local Feed Prices:	235	US\$/tonne
Dressing Yield:	44	%
Employee Wage Rates:	15	US\$/day
Meat Prices:	100	%



*and process the results ....*





# Case Study

FJB Systems  
M.E. Overview  
Business Tool  
**Case Study**  
Summary

US \$1.61 million



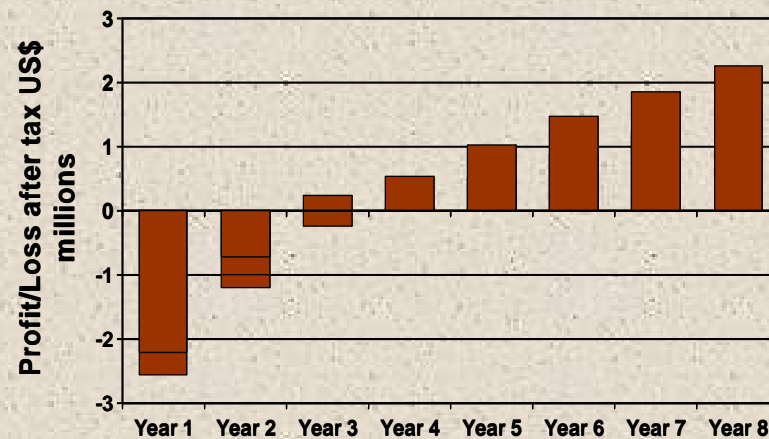
Adjusted profit US \$2.3 million

10% ↑ throughput



43% ↑ profit

**Profit & Loss Statement**





# Case Study

FJB Systems  
M.E. Overview  
Business Tool  
**Case Study**  
Summary

Assume 10% increase in Feed Prices

Livestock Purchase Price:	27	A\$/head (FAS Western Australia)
Exchange Rate:	0.585	US\$/A\$
Throughput:	2000	Sheep/day
Average Local Feed Prices:	259	US\$/tonne
Dressing Yield:	44	%
Employee Wage Rates:	15	US\$/day
Meat Prices:	100	%



*and process the results ....*



# Case Study

FJB Systems  
M.E. Overview  
Business Tool  
**Case Study**  
Summary

US \$1.61 million



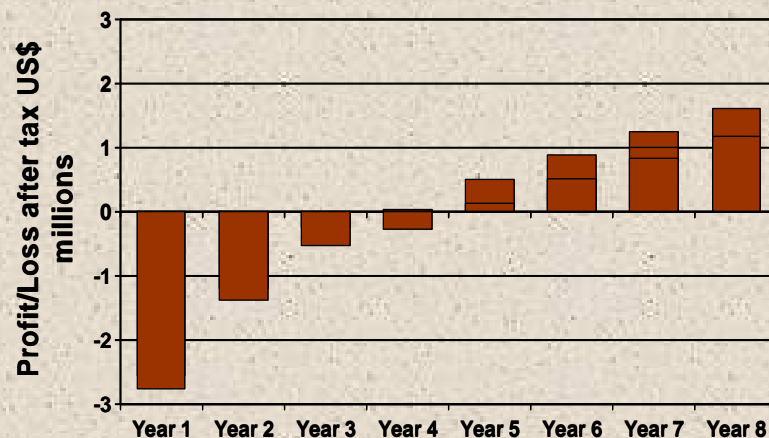
Adjusted profit **US \$1.17 million**

10% **↑** feed price



**27% ↓** profit

Profit & Loss Statement





# Case Study

FJB Systems  
M.E. Overview  
Business Tool  
**Case Study**  
Summary

Assume 1% increase in Dressing Yields

Livestock Purchase Price:	27	A\$/head (FAS Western Australia)
Exchange Rate:	0.585	US\$/A\$
Throughput:	2000	Sheep/day
Average Local Feed Prices:	235	US\$/tonne
Dressing Yield:	45	%
Employee Wage Rates:	15	US\$/day
Meat Prices:	100	%



*and process the results ....*



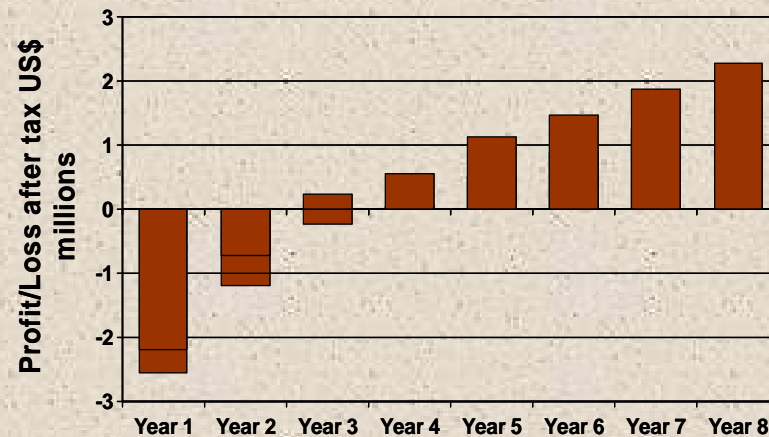


# Case Study

FJB Systems  
M.E. Overview  
Business Tool  
**Case Study**  
Summary

US \$1.61 million → Adjusted profit US \$2.27 million  
1% ↑ dressing yields → 40% ↑ profit

Profit & Loss Statement





# Case Study

FJB Systems  
M.E. Overview  
Business Tool  
**Case Study**  
Summary

Assume 10% increase in Wage Rates

Livestock Purchase Price:	27	A\$/head (FAS Western Australia)
Exchange Rate:	0.585	US\$/A\$
Throughput:	2000	Sheep/day
Average Local Feed Prices:	235	US\$/tonne
Dressing Yield:	44	%
Employee Wage Rates:	16.50	US\$/day
Meat Prices:	100	%



*and process the results ....*



# Case Study

FJB Systems  
M.E. Overview  
Business Tool  
**Case Study**  
Summary

US \$1.61 million



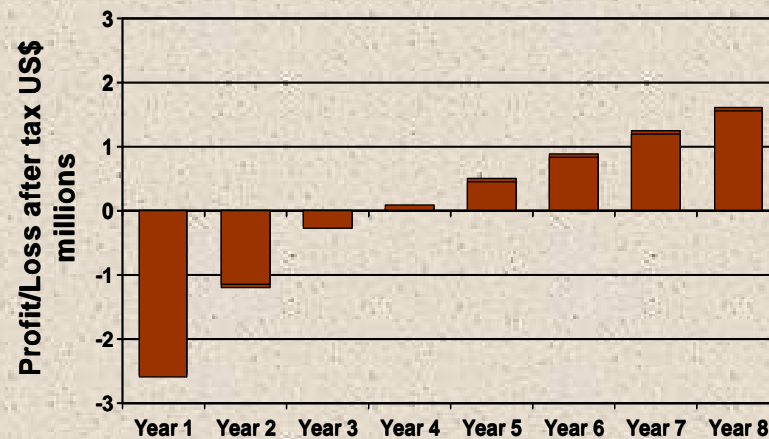
Adjusted profit US \$1.56 million

10% ↑ wage rates



3% ↓ profit

Profit & Loss Statement





# Case Study

FJB Systems  
M.E. Overview  
Business Tool  
**Case Study**  
Summary

Assume 1% increase in Meat Prices

Livestock Purchase Price:	27	A\$/head (FAS Western Australia)
Exchange Rate:	0.585	US\$/A\$
Throughput:	2000	Sheep/day
Average Local Feed Prices:	235	US\$/tonne
Dressing Yield:	44	%
Employee Wage Rates:	15	US\$/day
Meat Prices:	101	%



*and process the results ....*





# Case Study

FJB Systems  
M.E. Overview  
Business Tool  
**Case Study**  
Summary

US \$1.61 million



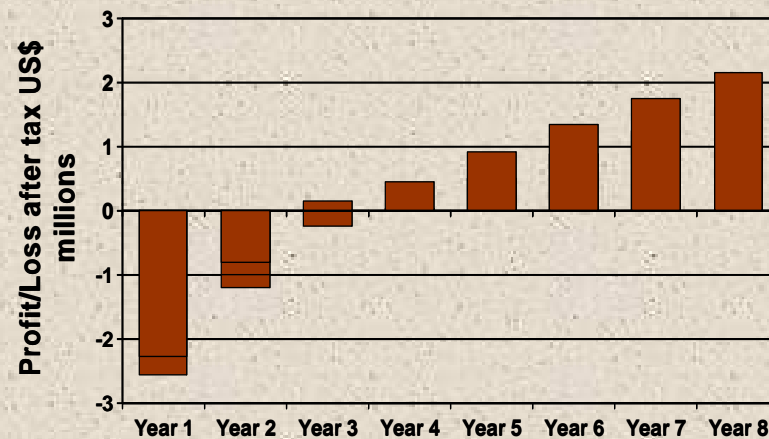
Adjusted profit **US \$2.14 million**

1% **↑** meat prices



**33% ↑** profit

Profit & Loss Statement





# Case Study

FJB Systems  
M.E. Overview  
Business Tool  
**Case Study**  
Summary

## Summary of Plant Operating Costs:-

Livestock Purchase	44.74%	}	95.27%
Freight Costs	41.59%		
Feedlot Costs	8.94%		
Direct Labour	1.17%		
Production Consumables	0.22%		
Services Costs	0.95%		
Inspection Costs	0.56%		
Overheads & Misc.	<u>1.83%</u>		
(Excl. Depr. & Finance)	100.00%		

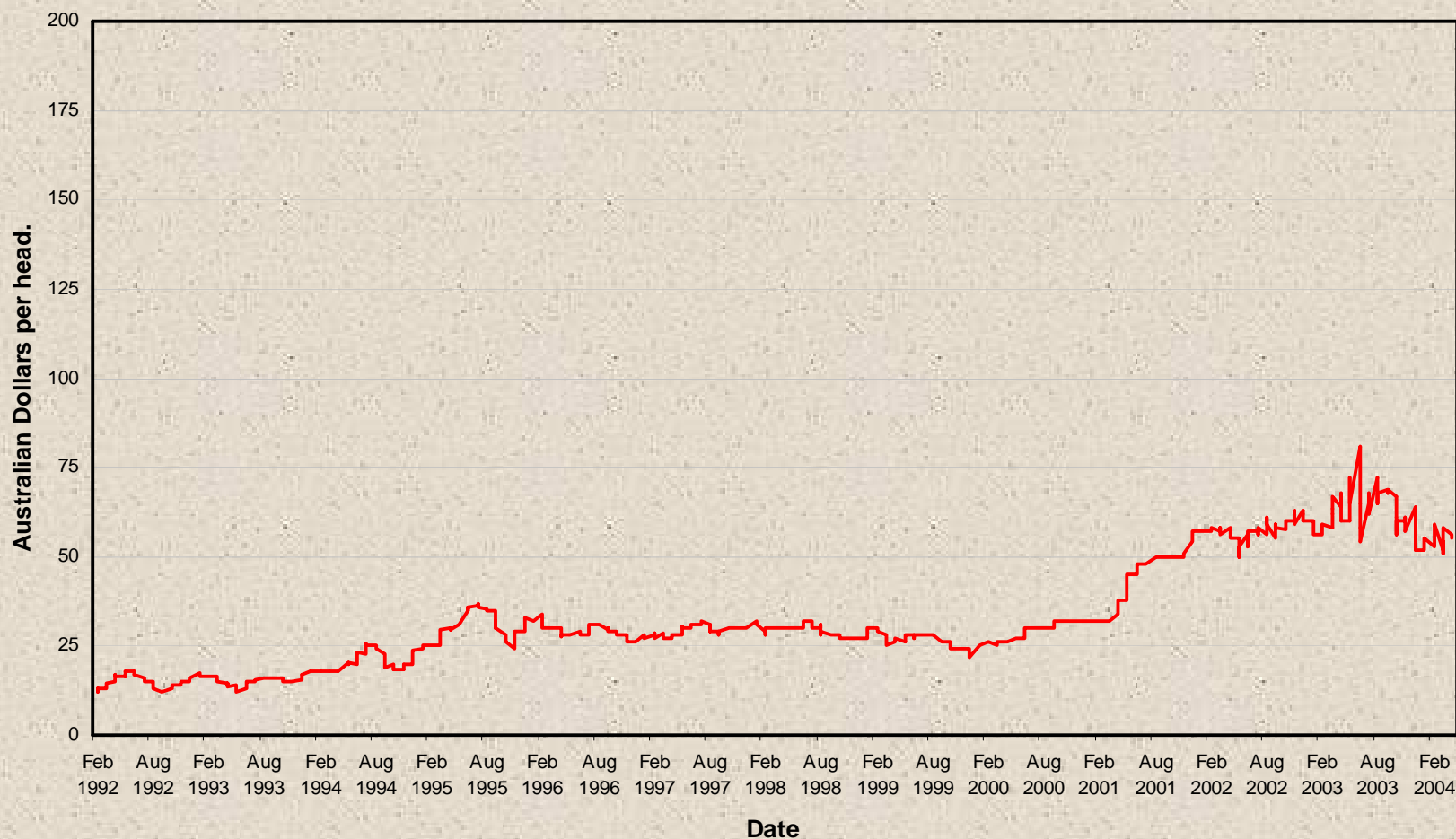




# Case Study

FJB Systems  
M.E. Overview  
Business Tool  
**Case Study**  
Summary

Australian live wether export prices to the Middle East  
February 1992 to April 2004



All prices free alongside ship (FAS) Western Australian

Source: MLA

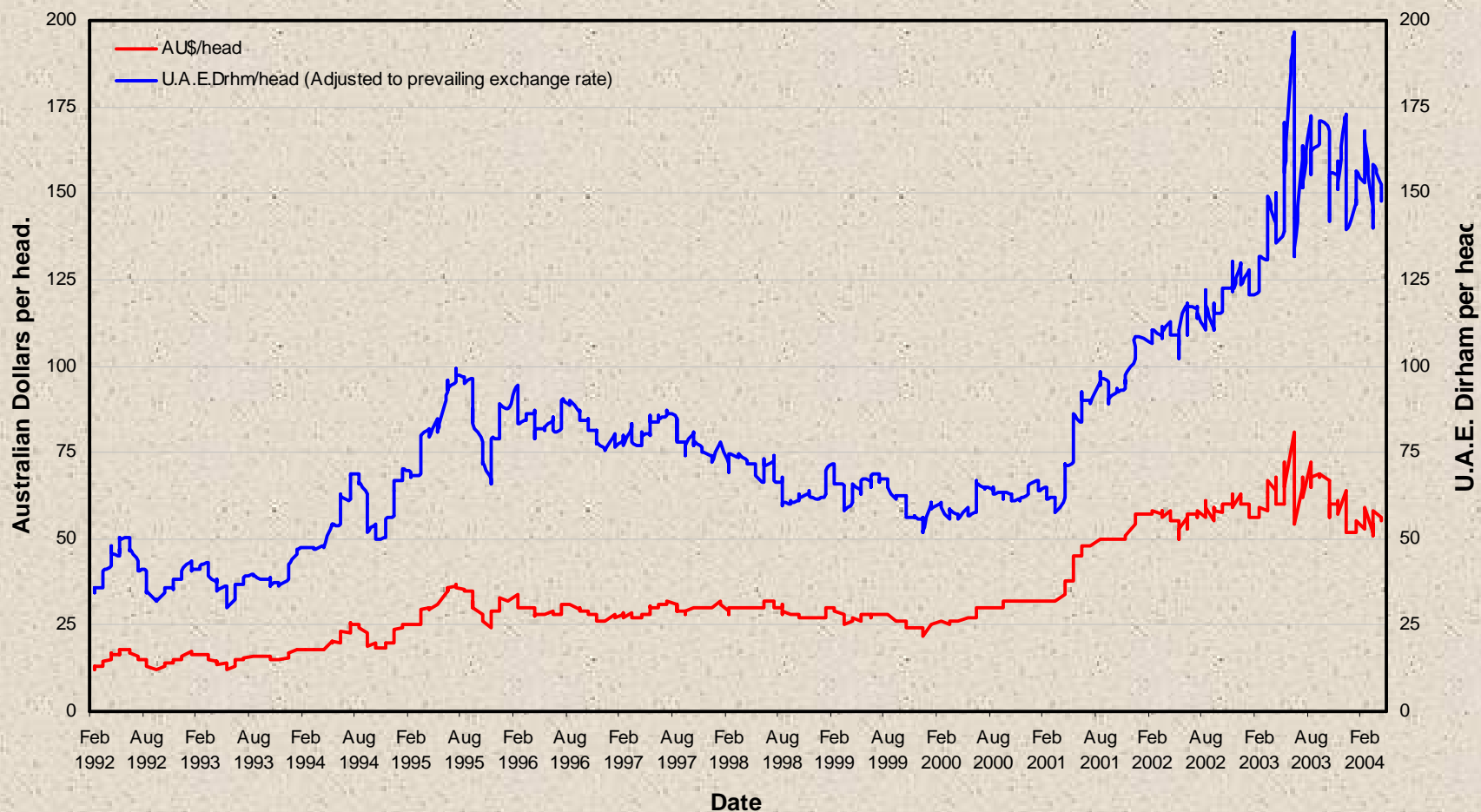




# Case Study

FJB Systems  
M.E. Overview  
Business Tool  
**Case Study**  
Summary

Australian live wether export prices to the Middle East  
February 1992 to April 2004



All prices free alongside ship (FAS) Western Australian

Source: MLA







# Summary

FJB Systems  
M.E. Overview  
Business Tool  
Case Study  
**Summary**

- **Live Import Slaughterhouse extremely sensitive**
- **Exchange Rates**
- **Livestock Price & Quality**
- **Feed Prices**
- **Freight Charges**
- **Business Model allows scientific analysis and determination of risk for such a business**

