Dr. Despal., S.Pt., M.Sc.Agr.
Dept. Animal Nutrition & Feed Technology
Bogor Agriculture University
Bogor, Indonesia

Content

- Background
- Problem of
  - Indonesian Feed Industry
  - Local corn problem
  - Characteristic of corn farmer
  - Available dryer
- Solution

Indonesian feed industry attacked by increasing global corn price

Increasing Demand of corn

Global climate change

Increasing Demand of corn

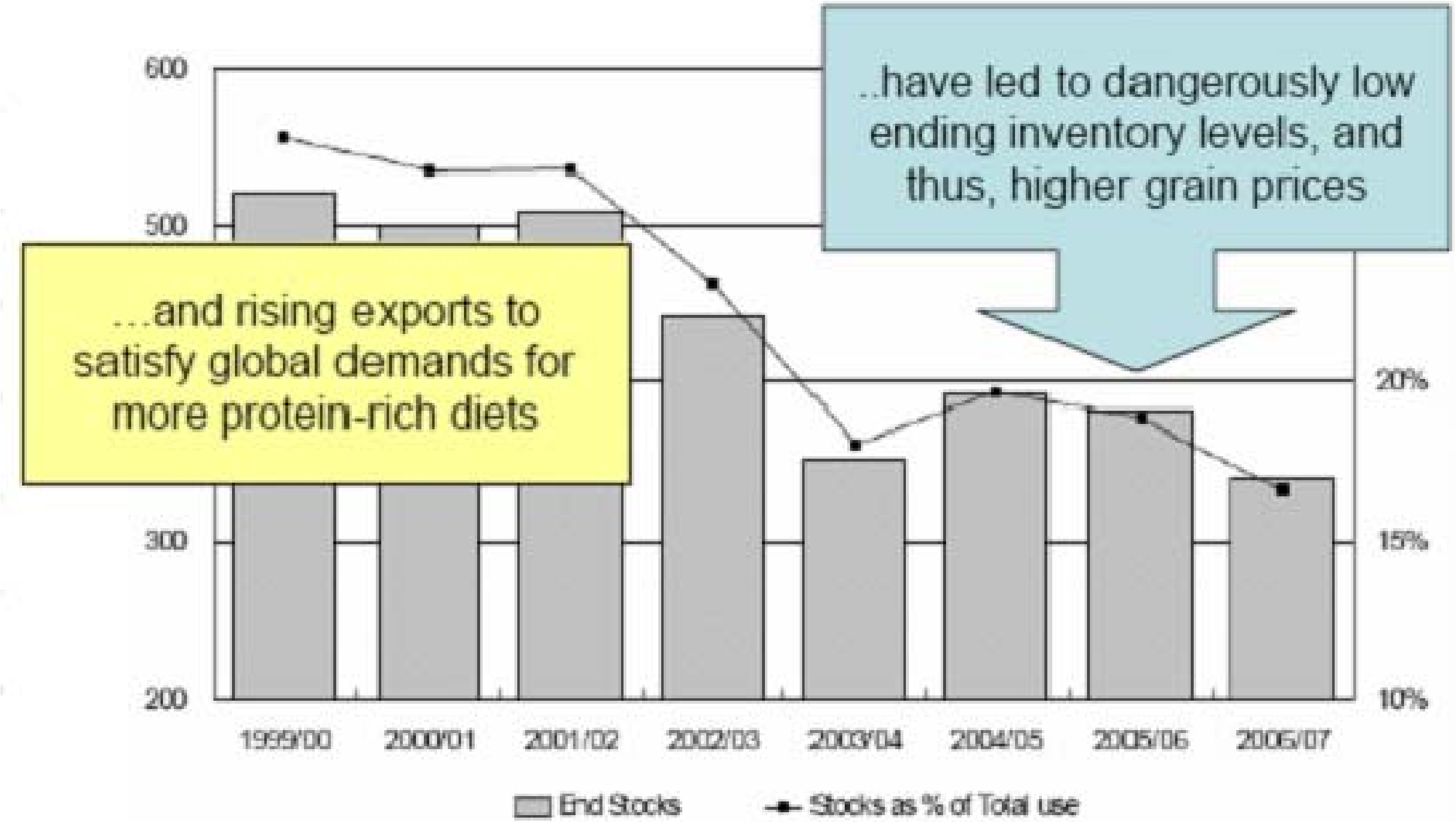
Corn price double

Depress Indonesian feed industry

Driven in the competition between feed, food and fuel

- Energy security concerns
- Global warming concerns
- Depletion of grain stocks
- Increased global energy demand and rising fuel cost
- The high cost of alternatif energy

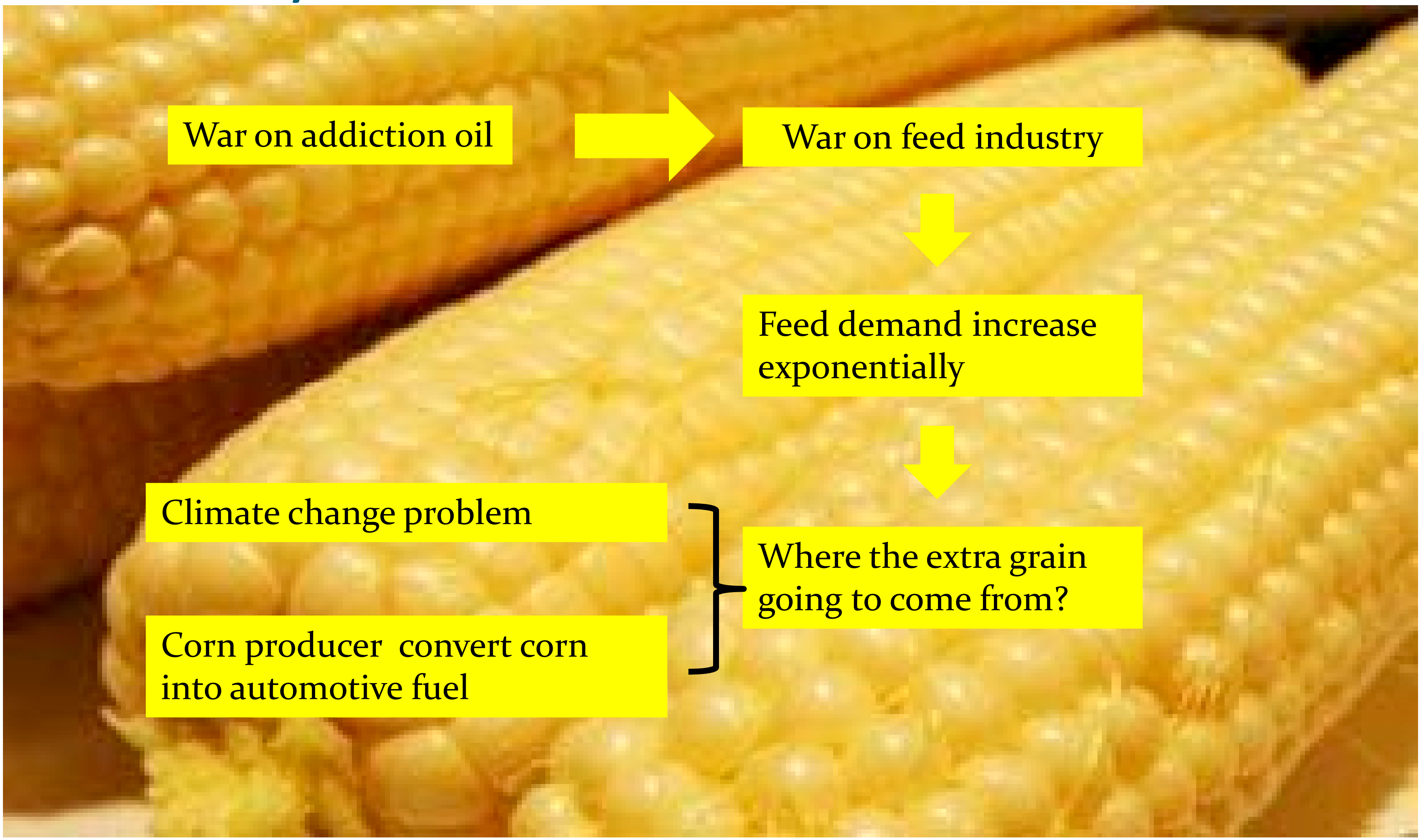
Depletion of grain stock



Driven in the competition between feed, food and fuel

- Energy security concerns
- Global warming concerns
- Depletion of grain stocks
- Increased global energy demand and rising fuel cost
- The high cost of alternatif energy

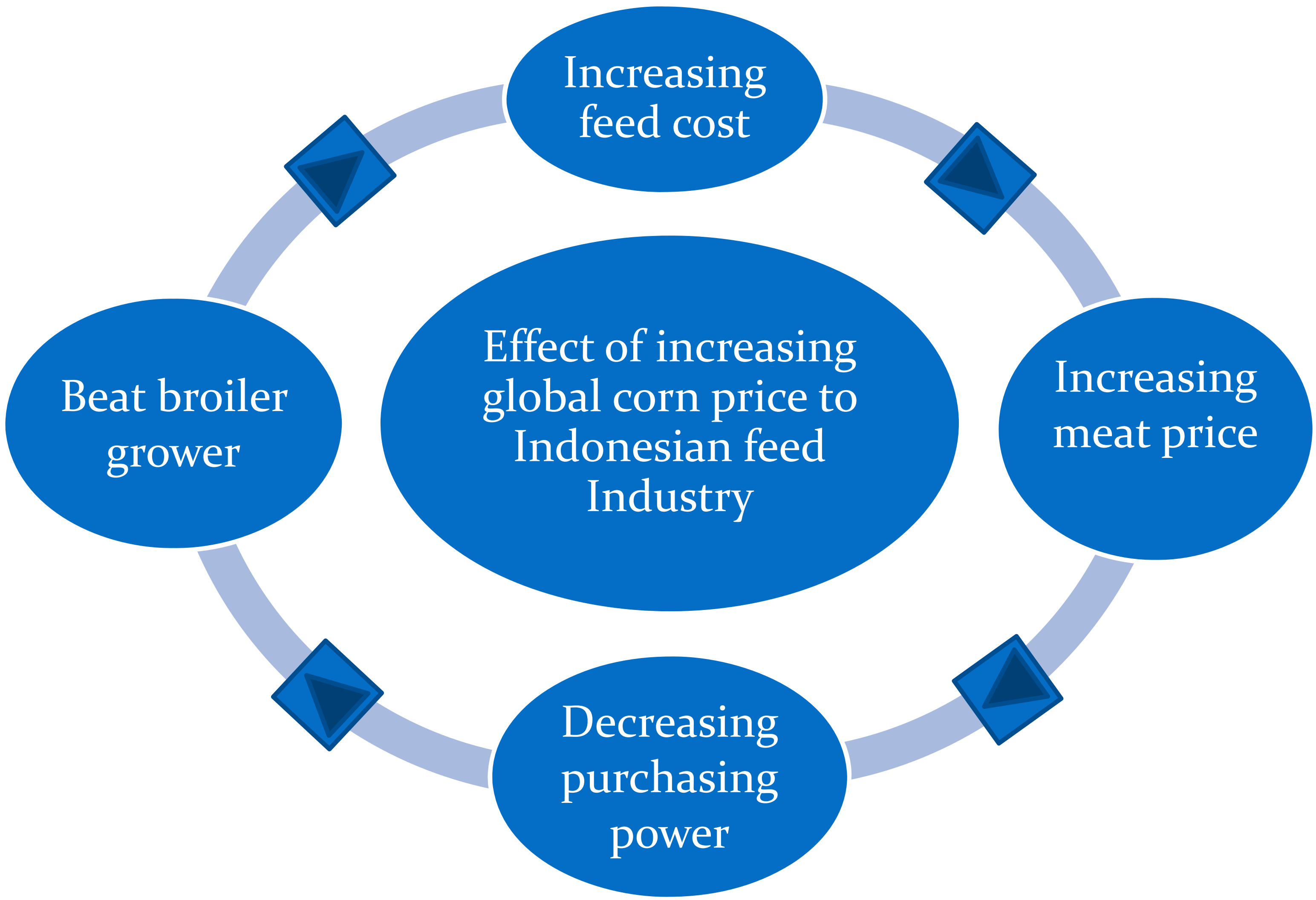
Effect of energy supplies on the feed industry



1. Indonesian feed industry

- 55% of the feed ingredient is come from corn
- National corn production 2006: 11.6 mio ton (for food)
- Import: 6.45 mio ton (mostly for feed)





……………… Incresing national corn production

2. Local corn production

- Seasonal availability: 2 – 3 times harvest/year
- Fluctuation in quality: spoilage, vary in moisture and nutrient content
- Humid area: temperature 25 – 330C, RH 85%, interupt by rain……….. Solar drying unfeasible

2. Local corn production

- Lack of postharvest technology,
  - manual harvest: extent time and increase contamination
  - Solar drying
  - Storaging

3. Indonesian farmer characteristic

- Low farming scale (< 0.5 ha land; < 2 ton/year corn production)
- Low capital investment
- Lack of technology
- Undistribute properly

4. Available commercial corn dryer

- Unreachable to small farmer
- Operate by dryer company in imbalance profit sharing
- farmer less motivation to increase corn area
- Less corn available for feed industry

Model	Type	GN 1092 / box
Capacity	kg	4000
Drying model	type	Indirect
Blower	type	Axial
Drying speed	%	2-4
Power source, diesel	PK/Rpm	7 / 2200
Oven Dimension	cm	650 x 200 x 115
	cm	125 x 65 x 65

Solution

- Farming group
- Alternative drying technology
- Industrialization and mechanisation of corn production, investor in java outer island
- Establishment of corn post harvest technology by goverment or feed industry

- Yesterday´s ‚what if“ is today reallity and a dilemma for tomorrow
- An incredible challange: A global effort to feed a hungry world yet provide energy, yet be open to consumer demands

Lyons (2007)

Corn Price

• 1980	: $2/bushel
• Beginning of 2006	: $2/bushel
• End of 2006	: $4/bushel
• Now	:

Why corn demand increase?

Increasing prosperity of populous country

- China and India

Increase demand of meat

- wealth related to meat consumption

Increasing animal number

Increasing feed needed

Increasing corn requirement

1293 billion barrels of reserves

Oil	• 12 years
Natural gas	• 64 years
Coal	• 155 years

Renewable energy (14%)