

# Southeast Asia Animal Feed Additives Market: Overview And Trends

**Sri Ganesh Janarthanan**  
**Chemical, Material and Food**

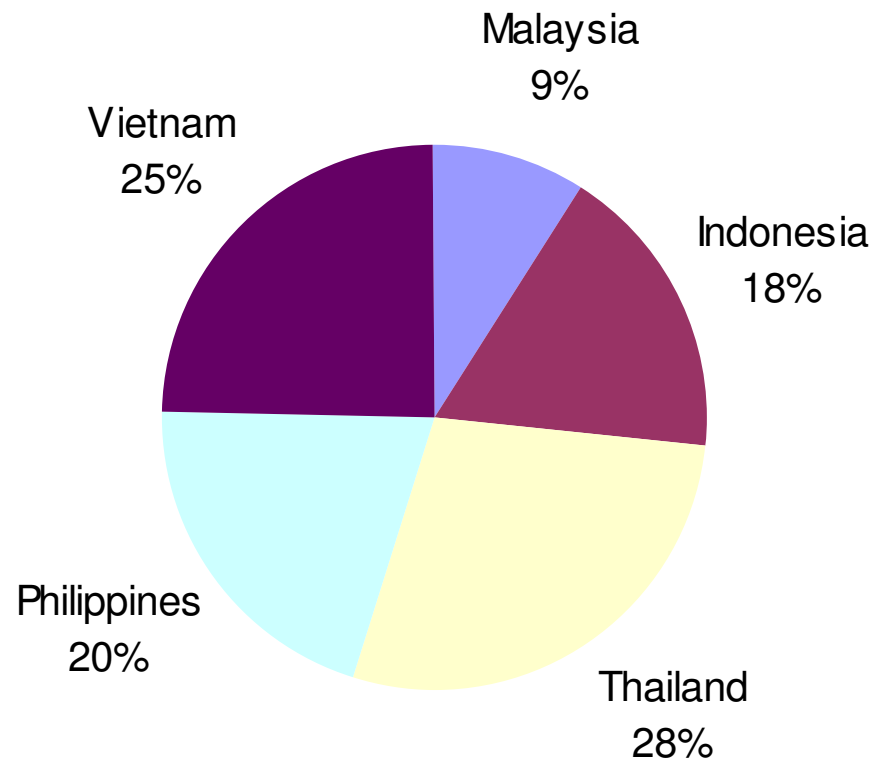


# Table of Content

- Feed Industry in South East Asia
- Industry Structure in Southeast Asia
- Supply Chain in Southeast Asia
- Role of Feed Additives in the Human Food Chain
- Feed Additives Segmentation
- SWOT Analysis
- Total Feed Additives
- Feed Amino Acids
- Feed Acidifiers
- Feed Enzymes
- Feed Antibiotics
- Direct-Fed Microbials
- Conclusions

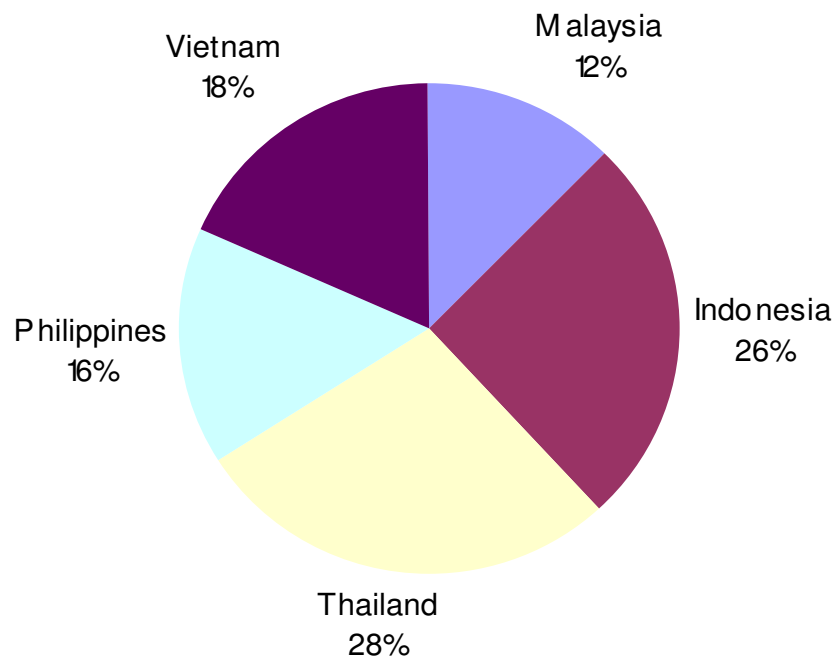
## Feed Industry in South East Asia

**Thailand > Vietnam > Philippines > Indonesia > Malaysia**

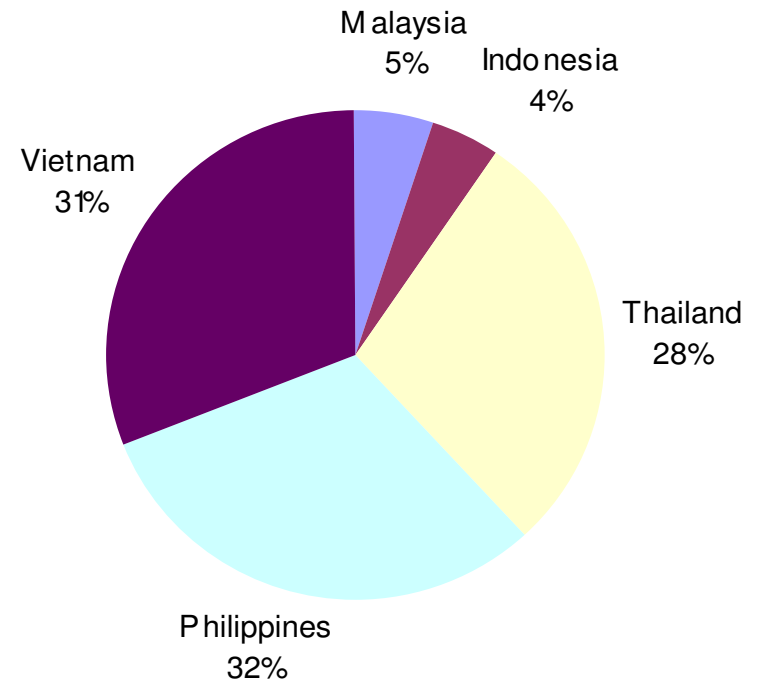


# Feed Industry in South East Asia

## Poultry



## Swine

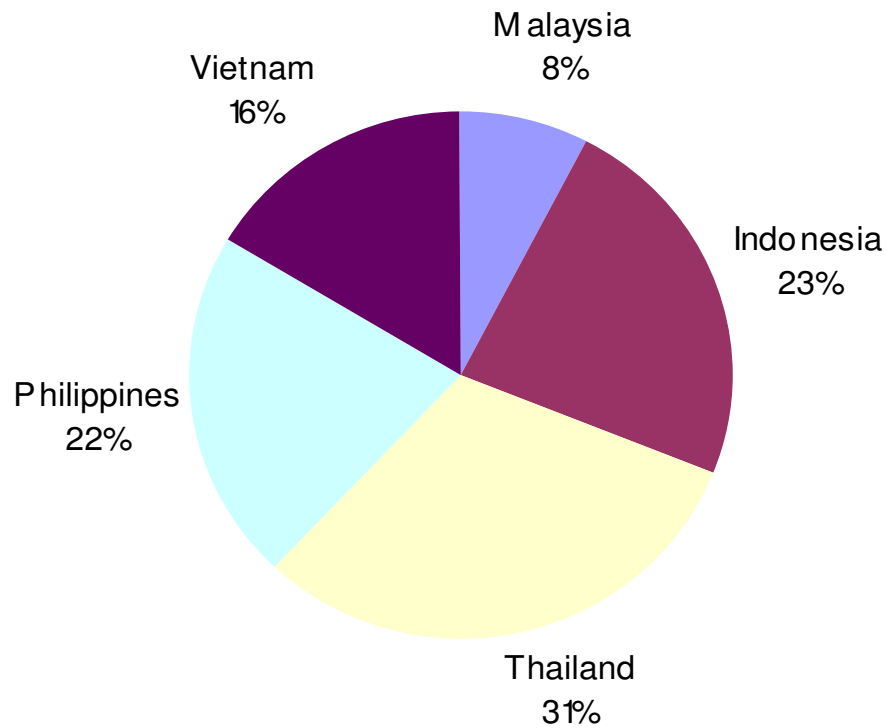


\*Shares were based on total production of respective feed in MT/y

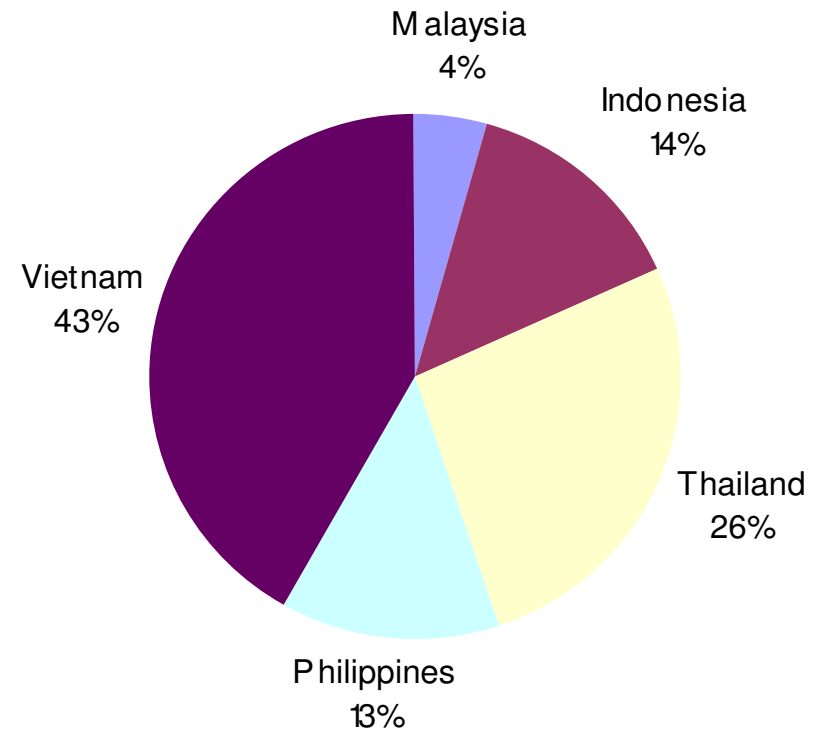
\*Aqua feed includes brackishwater, freshwater culture and mariculture feeds

# Feed Industry in South East Asia

## Ruminant

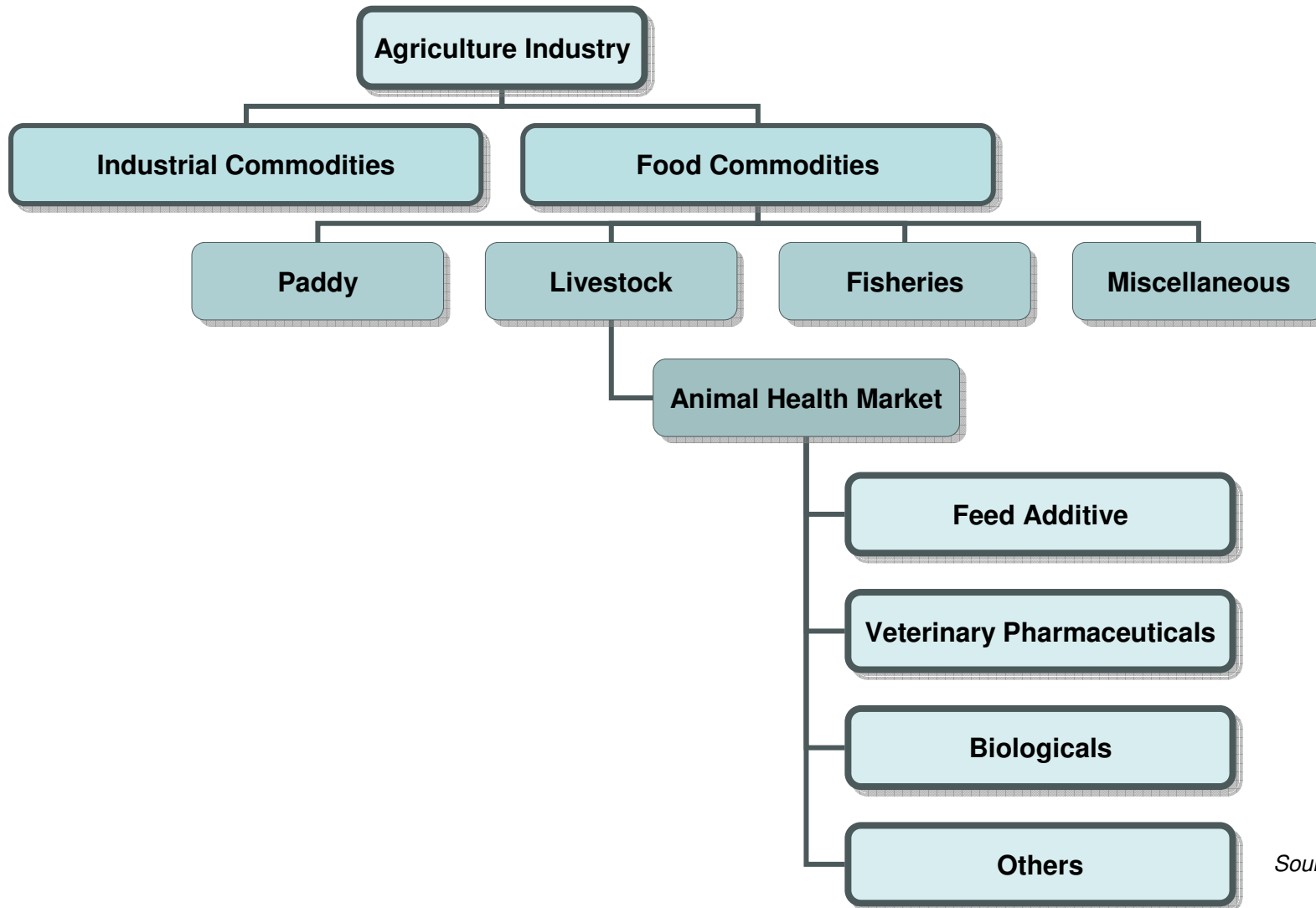


## Aqua



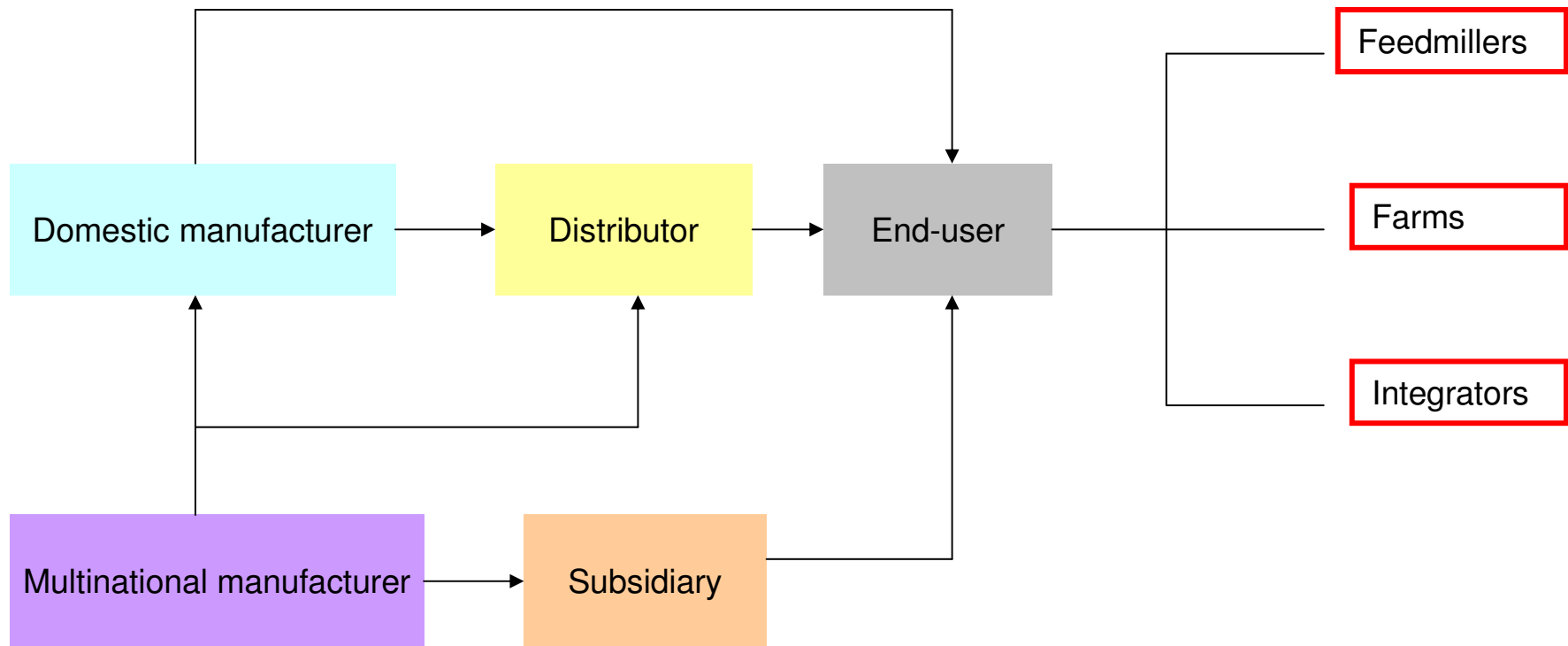
\*Shares were based on total production of respective feed in MT/y

# Industry Structure in Southeast Asia



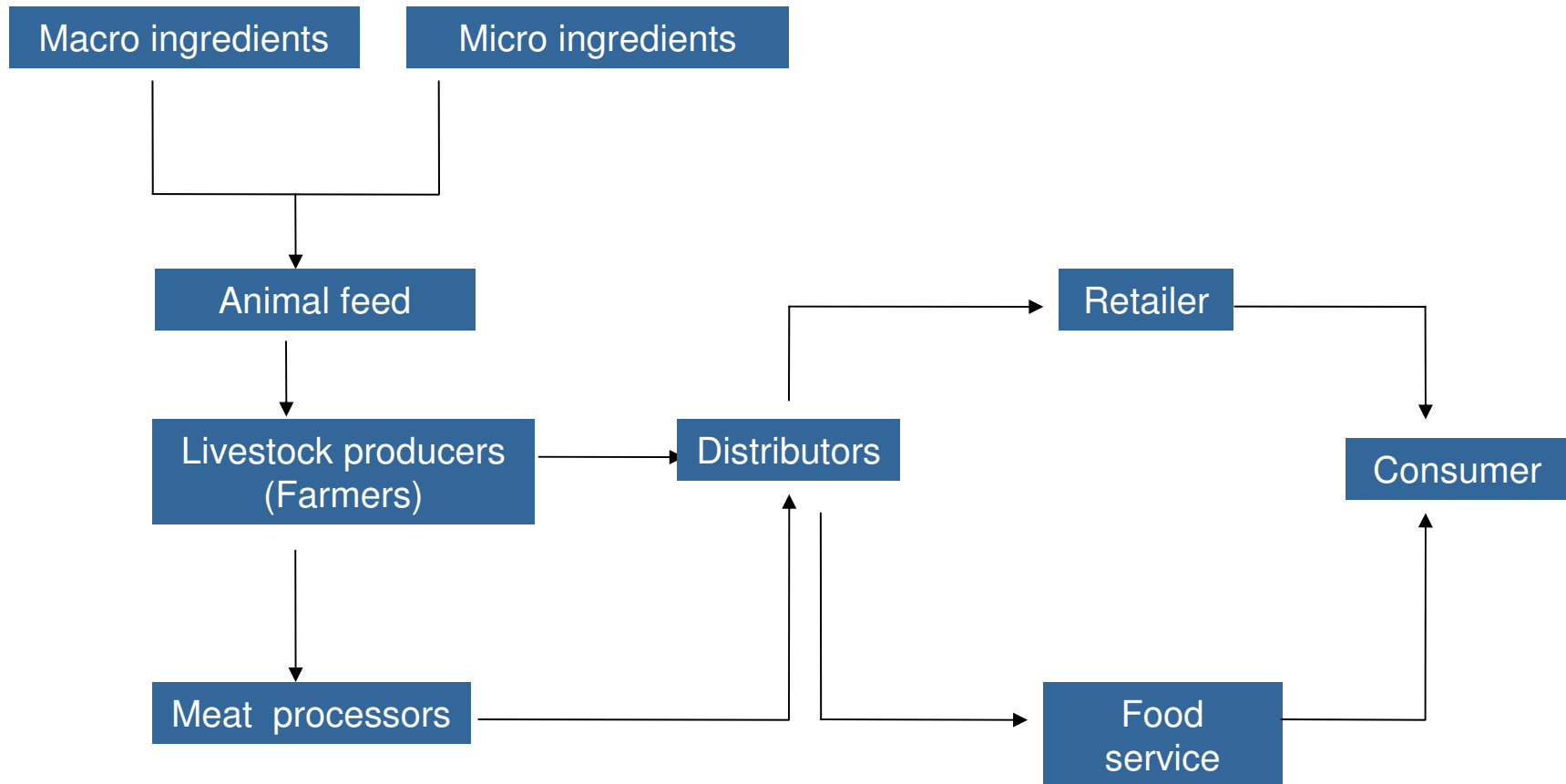
Source: Frost & Sullivan

# Supply Chain in Southeast Asia



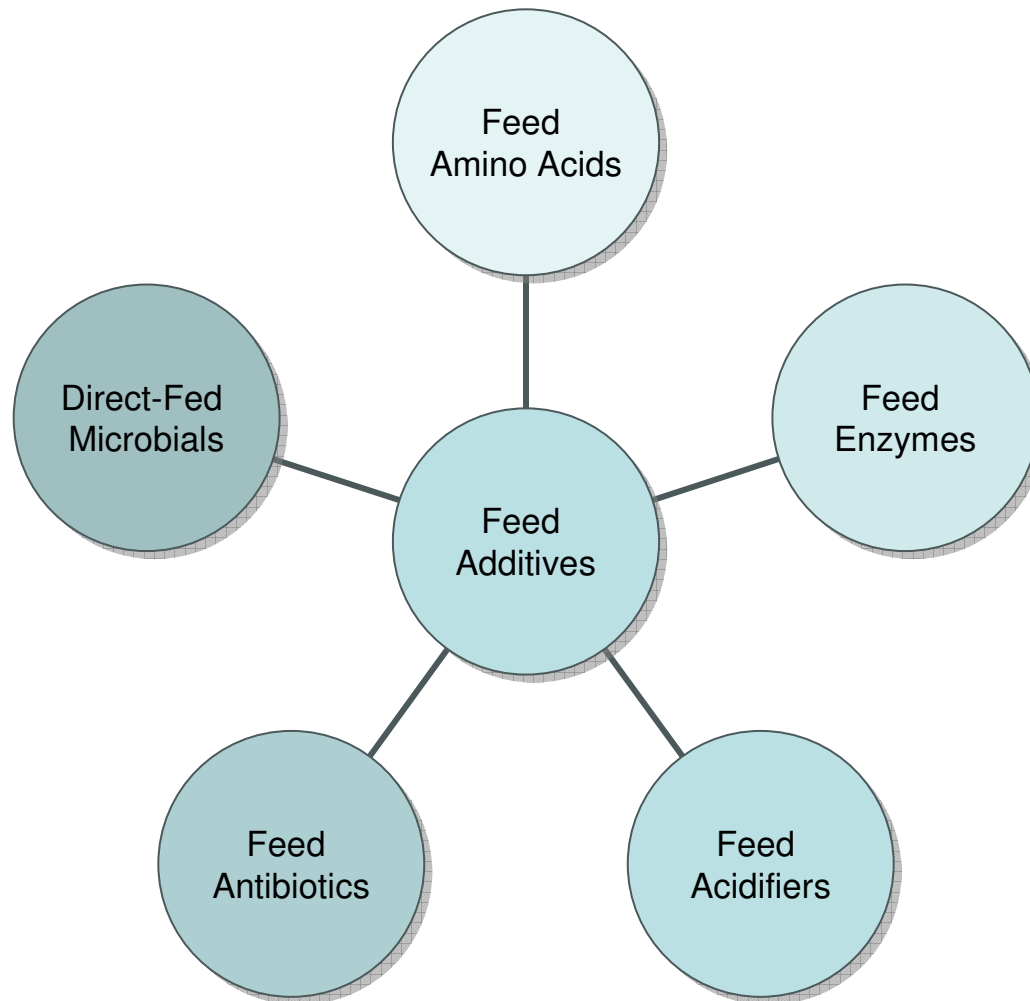
Source: Frost & Sullivan

# Role of Feed Additives in the Human Food Chain



Source: Frost & Sullivan

# Feed Additives Segmentation



Source: Frost & Sullivan

## SWOT Analysis in SEA – STRENGTH - WEAKNESS

- **Scientific evidence backing the merits of using feed additives**
- **Increasing industry sophistication**
- **Strong Government support in countries such as Thailand and Vietnam to develop their livestock industries**
- **High quality standards of products from European multinational suppliers**
- **Introduction of post pelleting liquid application system improves stability of enzymes**
- **Conservative farmers unwilling to try new additives**
- **Lack of variation in feed macro ingredients limits usage of additives (most common macro ingredients are corn and soy)**
- **Price-driven buying decision by end-users**
- **Inadequate levels of technical knowledge among farmers (regarding formulations and nutrition)**
- **Continued legal use of antibiotics as growth promoters weakens demand for direct-fed microbials**

## SWOT Analysis in SEA – OPPORTUNITIES - TREATS

- **Consistent and growing demand for meat products driving livestock numbers and consequently driving feed additive volumes**
- **Increased awareness among veterinarians, feed millers and integrators**
- **The EU ban on the use of antibiotic growth promoters increases uptake opportunities for acidifiers, enzymes and direct-fed microbials**
- **High cost of feed proteins such as soybean meal improves attractiveness of additives such as amino acids to reduce overall costs**
- **Recent livestock disease outbreaks help increase focus on health, safety and hygiene of livestock; thus helping improve acceptance of feed additives that guarantee quality improvements in feed**
- **Increased competition (especially from low cost producers such as those from China) results in reduced margins for companies**
- **The abundance of cheap generic products in the market**
- **Recurrence of bird flu outbreak or other livestock diseases could negatively impact volume and value**

## Total Feed Additives – Market Overview and Trends

**Feed Additives or micro ingredients are mixed with macro ingredients such as corn, soybean meal, fish meal and bone meal to produce a compound feed.**

Market age	Growth Stage	
Revenues (2007)	\$323.5 million	Increasing
Potential revenues (2012)	\$474.8 million	Increasing
Market size in units (2007)	123,700 tons	Increasing
Market size in units (2012)	181,500 tons	Increasing
Base year market growth rate	6.7%	Decreasing
Compound annual growth rate (2005 –2012)		7.6%
Competitors (active market competitors)	100 to 120	Increasing

*Source: Frost & Sullivan*

# Total Feed Additives – Forecast and Trends

## Market Drivers

- 1 Consistent Demand for Meat Products Drives Market Growth
- 2 Increased Awareness Among Veterinarians, Feed-millers and Integrators
- 3 Scientific Evidence Backing the Merits of Using Feed Additives
- 4 Increasing Industry Sophistication

## 3-4 Years

## 5-7 Years



## Market Restraints

- 1 Increased Competition Results in Reduced Margin
- 2 Conservative Farmers Unwilling to Try New Additives
- 3 Developments in the EU have Influenced Consumer Groups in Southeast Asia to Push for Stronger Regulations
- 4 Lack of Variation in Feed Ingredients Limits Usage of Additives

## 3-4 Years

## 5-7 Years



High Impact



Moderate Impact



Low Impact

Source: Frost & Sullivan

# Total Feed Additives – Competitive Analysis

- **Number of Companies**                      100 to 120
  
- **Types of Competitors**
  - Europe-based multinational chemical companies
  - Asian manufacturers
  - Pre-mixers, local suppliers, traders and distributors
  
- **Distribution Structure**
  - Major companies supplying to end users through local office representatives
  - Manufacturers supplying to pre-mixers, local traders and distributors
  
- **Tiers of Competition**
  - Tier I: Multinational companies such as DSM, BASF, Danisco, Kemin, Alltech, Ajinomoto, Degussa
  
  - Tier II: Asian manufacturers including Chinese manufacturers and local manufacturers
  
  - Tier III: Medium-sized distributors, traders and premixers
  
- **Competitive Factors**
  - Formulation know-how, price, product quality and technical support

*Source: Frost & Sullivan*

# Feed Amino Acids – Market Overview and Trends

Methionine, Lysine, Threonine and Tryptophan are the four most commonly used amino acids in the animal feed industry.

Market age		Low growth
Revenues (2007)	\$230.6 million	Increasing
Potential revenues (2012)	\$295.4 million	Increasing
Market size in units (2007)	93,700 tons	Increasing
Potential market size in units (2012)	120,100 tons	Increasing
Base year market growth rate	6.7%	Decreasing
Compound annual growth rate (2007 –2012)	5.3%	
Price sensitivity		High
Competitors (active market competitors)	More than 50	Increasing

Source: Frost & Sullivan

# Feed Amino Acids – Forecast and Trends

## Market Drivers

		1-2 Years	3-4 Years
1	High Cost of Feed Proteins		
2	Proven Technical Benefits of Including Amino Acids into Animal Feed		
3	Aggressive Marketing Activities by Active Market Participants		
4	High Awareness Levels of the Benefits of Using Amino Acids		

## Market Restraints

		1-2 Years	3-4 Years
1	Erratic Supply and Fluctuating Prices of Amino Acids Hamper Market Growth		
2	Increasing Number of Competitors		



High Impact



Moderate Impact



Low Impact

Source: Frost & Sullivan

# Feed Amino Acids – Competitive Analysis

- **Number of Companies** More than 50
- **Types of Competitors**
  - Europe based manufacturers
  - Asian manufacturers
  - Local suppliers, traders and distributors
- **Distribution Structure**
  - Major companies supplying to end users through local office representatives.
  - Manufacturers supplying to local traders and distributors
- **Tiers of Competition**
  - Tier I: Large manufacturers such as Degussa, Adisseo, Sumitomo Chemicals Company, Ajinomoto, BASF and PT Cheil Samsung
  - Tier II: Medium-sized Asian manufacturers
  - Tier III: Local suppliers, distributors and traders such as Danberg, Romindo Primavetcom, Viphavet Co Ltd., Rhodia Malaysia
- **Competitive Factors**
  - Price and technical support

*Source: Frost & Sullivan*

## Feed Acidifiers – Market Overview







**Feed acidifiers perform the function of growth enhancers, mould inhibitors/preservatives and Salmonella preventives**

Market age	Growth Stage	
Revenues	\$44.2 million	Increasing
Potential revenues 2012	\$96.0 million	Increasing
Base year market size in units	21,800 tons	Increasing
Potential market size in units–2012	47,300 tons	Increasing
Base year market growth rate	12.0%	Increasing
Compound annual growth rate (2005 –2012)	15.4%	
Price sensitivity	Low	
Competitors (active market competitors in base year)	60 to 70	Increasing

*Source: Frost & Sullivan*

# Feed Acidifiers – Forecast and Trends

## Market Drivers

		1-2 Years	3-4 Years
1	Increasing Emphasis on Feed Hygiene		
2	Functions as a Growth Enhancer		
3	Government Emphasis on Clean Feed		

## Market Restraints

		1-2 Years	3-4 Years
1	Acceptance Level of End-users is Still Quite Low		
2	Price-driven Market Restraints Revenue Growth		



High Impact



Moderate Impact



Low Impact

Source: Frost & Sullivan

# Feed Acidifiers – Competitive Analysis

- **Number of Companies** 60-70
- **Types of Competitors**
  - Large multinational chemical companies
  - Local manufacturers
  - Premixes, traders and distributors
- **Distribution Structure**
  - Major companies supplying to end users through local office representatives.
  - Manufacturers supplying to premixes, local traders and distributors
- **Tiers of Competition**
  - Tier I: Large multinational such as Kemin, BASF and Agil
  - Tier II: Local manufacturers such as Sunzen as well as Chinese manufacturers
  - Tier III: Distributors and traders such as SCC, Agri-Bio Philippines, Litogo and Gladron
- **Competitive Factors**
  - Technical support, price, product range and efficacy of product

Source: Frost & Sullivan

## Feed Enzymes – Market Overview

The two type of feed enzymes which are studied in this research are Non-starch polysaccharides (NSP) and Phytase.

Market age	Growth Stage	
Revenues (2007)	\$48.7million	Increasing
Potential revenues (2012)	\$83.4 million	Increasing
Market size in units (2007)	8,200 tons	Increasing
Potential market size in units (2012)	14,100 tons	Increasing
Base year market growth rate	2.5%	Increasing
Compound annual growth rate (2007 –2012)	8.8%	
Price sensitivity	Low	
Competitors (active market competitors)	40-50	Increasing

Source: Frost & Sullivan

# Feed Enzymes – Forecast and Trends

## Market Drivers

		1-2 Years	3-4 Years
1	Reduces Cost of Feed		
2	Reduces the Impact of Environmental Pollution		
3	Improves Feed Quality		

## Market Restraints

		1-2 Years	3-4 Years
1	High Initial Investments Needed to Include Enzymes in Animal Feed		
2	The Results of Using Enzymes Not Immediately Obvious		
3	End Users Lack the Necessary Knowledge to Add Enzymes into the Feed		



High Impact



Moderate Impact



Low Impact

Source: Frost & Sullivan

# Feed Enzymes – Competitive Analysis

- **Number of Companies in the Market** 40 to 50
- **Types of Competitors**
  - Europe-based multinational companies
  - Traders and distributors
  - Blenders
- **Distribution Structure**
  - Major companies supplying to end users through local office representatives
  - Manufacturers supplying to local traders and distributors
- **Tiers of Competition**
  - Tier I: Large manufacturers such as DSM, BASF, Adisseo, Danisco Animal Nutrition and Alltech
  - Tier II: Blenders, traders and distributors such as Kemin, Danberg, Maxion Bioscience and Litogo
- **Competitive Factors**
  - Product stability and efficacy, formulation know-how and technical support

*Source: Frost & Sullivan*

## Feed Antibiotics– Market Overview

- The ban imposed by the EU impacts the feed antibiotics market in Southeast Asia.
- This is especially so in Thailand, which exports poultry products to the EU. Feed additive suppliers in Thailand have claimed that the use of antibiotics for the purpose of growth promotion has decreased significantly since early 2006.
- However, other countries in the region such as Malaysia, Indonesia and the Philippines are relatively slow in following suit.
- In the future, consumer pressure and increased end-user awareness are likely to further reduce the use of antibiotics as growth promoters in animals.

# Feed Antibiotics – Forecast and Trends

## Market Drivers

		1-2 Years	3-4 Years
1	Antibiotics as Growth Promoters Cheaper Compared to the Other Growth Promoters		
2	Consistent Results in Performance as a Growth Promoter		
3	Intensive Farming Environment Encourages Spread of Diseases		

## Market Restraints

		1-2 Years	3-4 Years
1	Stringent Regulatory Environment Limits Market Growth		
2	Increasing Demand for Alternative Growth Promoters		
3	Pressure From the Media and Consumer Groups to Reduce the Use of Antibiotics		



High Impact



Moderate Impact



Low Impact

Source: Frost & Sullivan

# Feed Antibiotics – Competitive Analysis

- **Number of Companies** 20 to 30
- **Types of Competitors**
  - Multinational pharmaceutical companies
  - Local suppliers, traders and distributors
- **Distribution Structure**
  - Major companies supplying to end users through local office representatives
  - Manufacturers supplying to pre-mixers, local traders and distributors
- **Tiers of Competition**
  - Tier I: Large manufacturers such as Alpharma, Intervet and Pfizer
  - Tier II: Premixers and local distributors
- **Competitive Factors**
  - Technical support

*Source: Frost & Sullivan*

## Direct-Fed Microbials – Market Overview

- In Southeast Asia, the DFM market is still small.
- Its lack of consistency in providing the desired results is one of the reasons end users are not very keen on using DFM products.
- The use of antibiotics for growth promotion is still allowed in Southeast Asia.
- Integrators are more likely to use DFM products compared to small scale end users.

# Direct-Fed Microbials – Forecast and Trends

## Market Drivers

		1-2 Years	3-4 Years
1	A Replacement for Antibiotics as Growth Promoters		
2	An Important Additive to Maintain A Healthy Gut Microflora in Animals		
3	A Healthy Alternative to Using Chemicals and Antibiotics in the Feed		

## Market Restraints

		1-2 Years	3-4 Years
1	DFM Products Are Sensitive and Not Heat Stable		
2	High Cost of DFM		
3	Continued Legal Use of Antibiotics as Growth Promoters		



High Impact



Moderate Impact



Low Impact

Source: Frost & Sullivan

# Direct-Fed Microbials – Competitive Analysis

- **Number of Companies** 30 to 40
- **Types of Competitors**
  - Large multinational companies
  - Premixers, local suppliers, traders and distributors
- **Distribution Structure**
  - Major companies supplying to end users through local office representatives
  - Manufacturers supplying to pre-mixers, local traders and distributors
- **Tiers of Competition**
  - Tier I: Large multinationals such as Alltech
  - Tier II: Premixers, traders and distributors
- **Competitive Factors**
  - Formulation know-how, technical support and price

## Conclusions

- The market for feed additives in Southeast Asia is growing.
- It is moving towards maturity stage in the feed amino acids market and towards a decline in the feed antibiotics market segment.
- Feed acidifiers and enzymes market segments are in the process of significant growth.