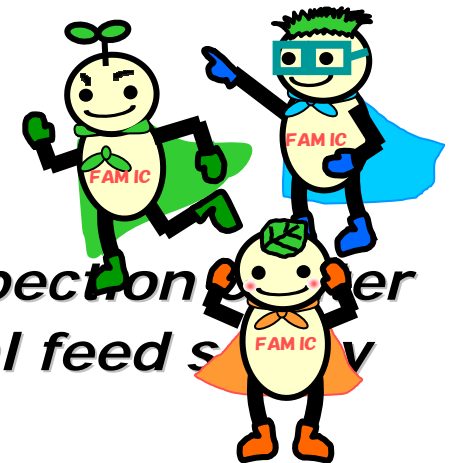


Regulatory framework on feed safety -international trends-

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Food and Agricultural Material Inspection Center
OIE Collaborating Center for animal feed safety
and analysis*



Contents

1. Feed chain approach and risk analysis
2. International standards on feed safety
3. Regulatory frameworks on feed safety in Japan, EU, US and Australia

1. Feed Chain Approach and Risk Analysis

Animal feed contaminated with undesirable substances or micro-organisms may:

- ✓ transmit infectious diseases and become pathway for the introduction of unwanted micro-organisms;
- ✓ result in animal products contaminated with undesirable substance or micro-organisms and cause human health problems

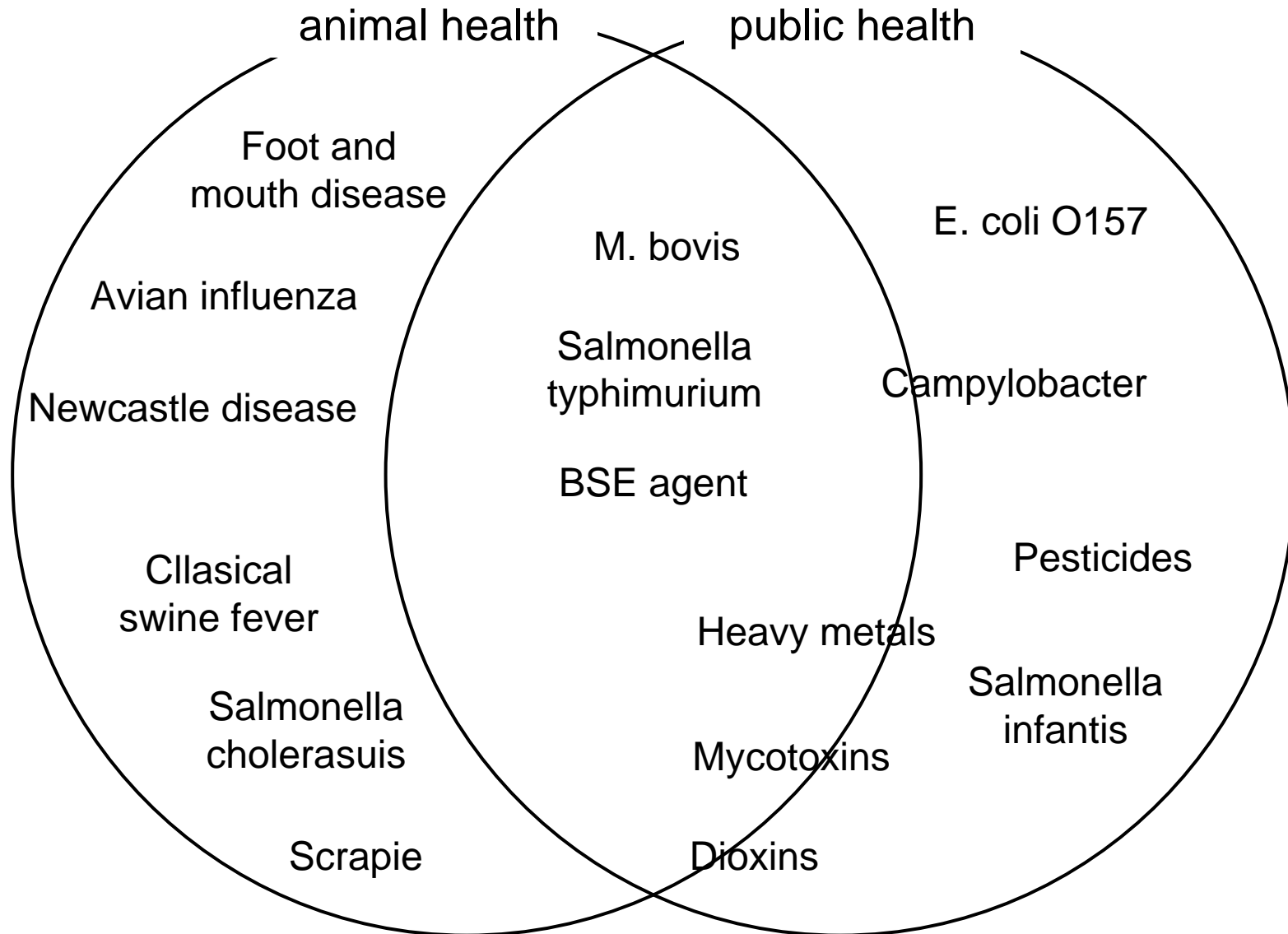
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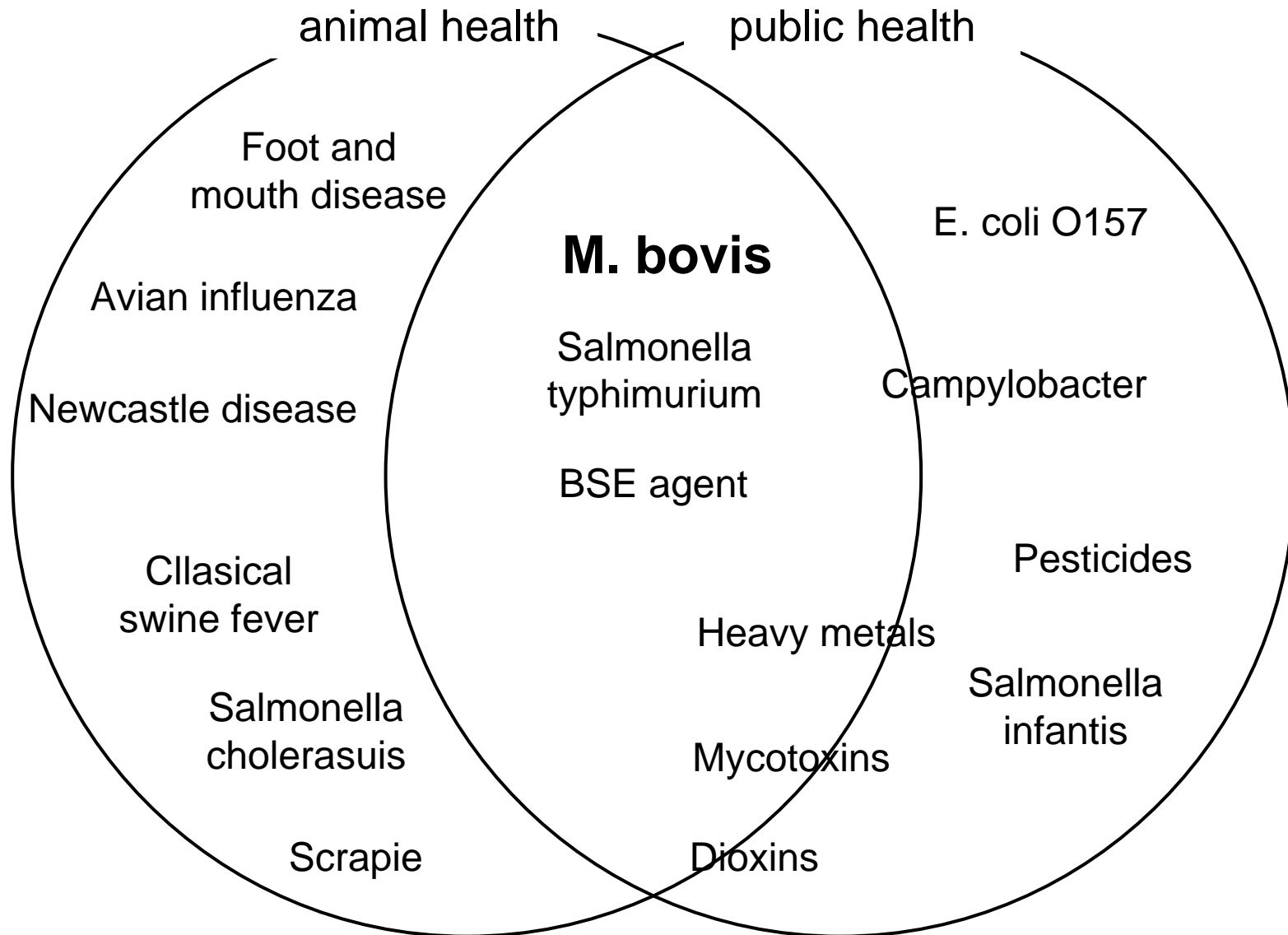
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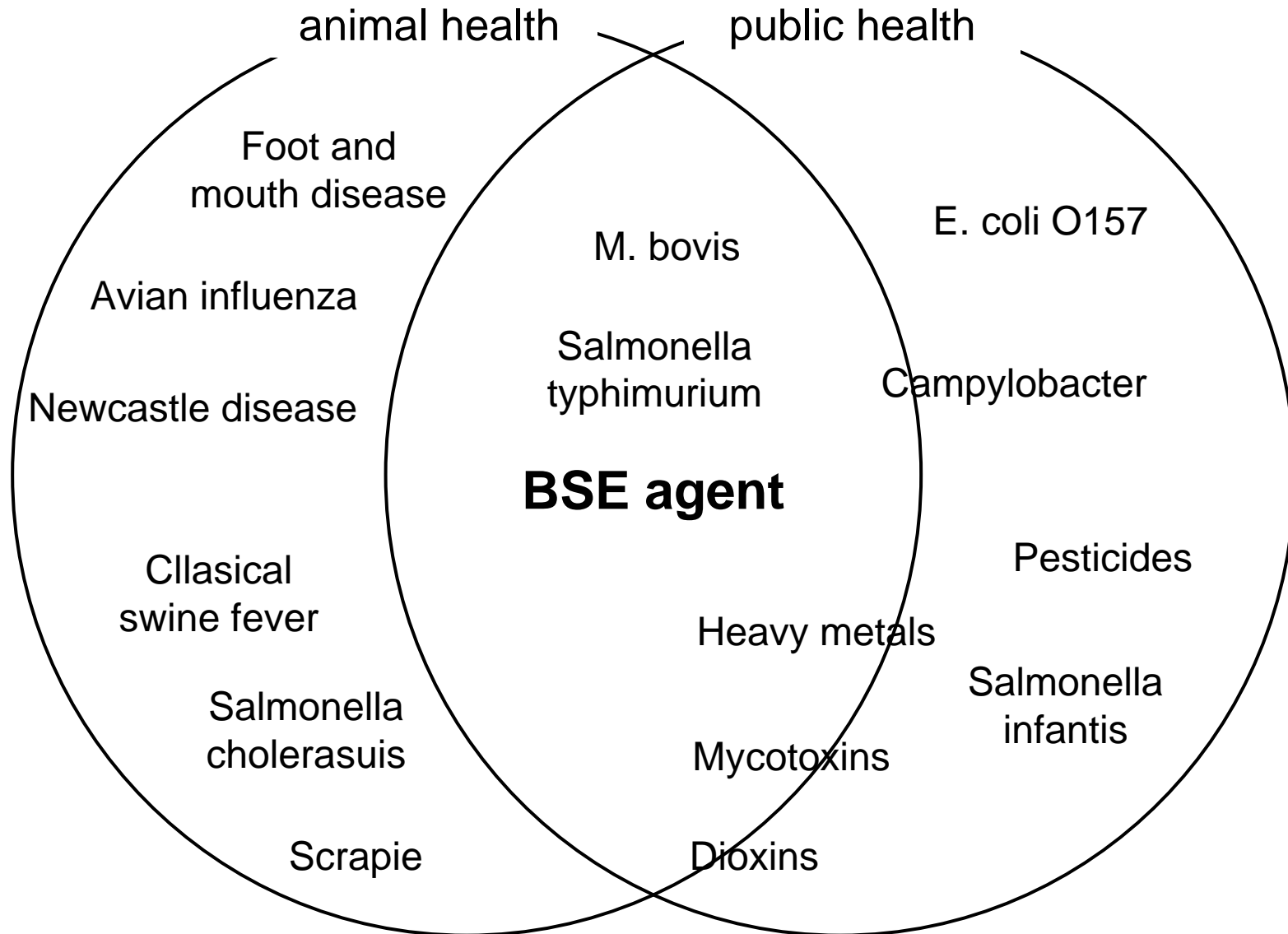
Hazards of animal health and public health importance



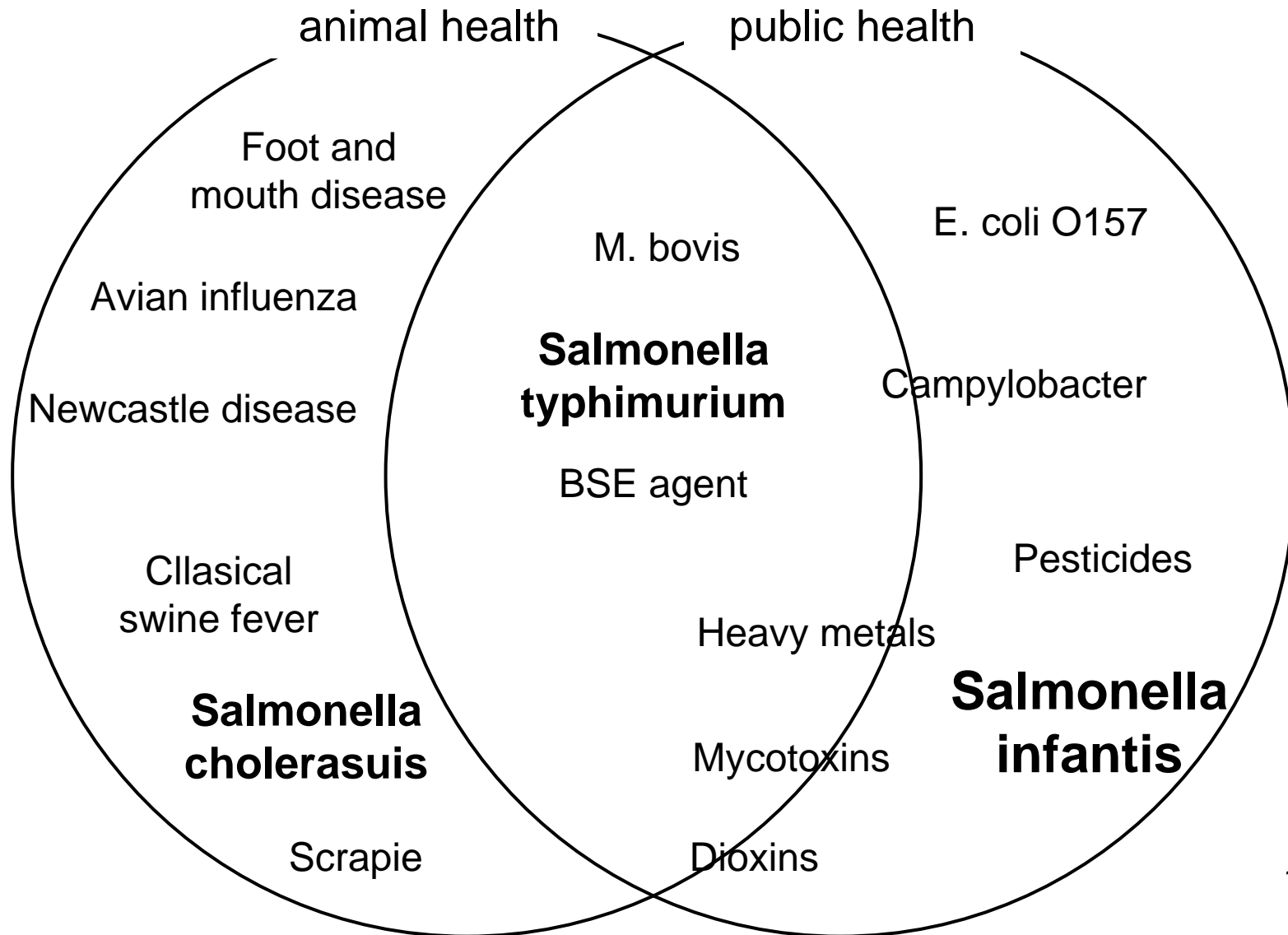
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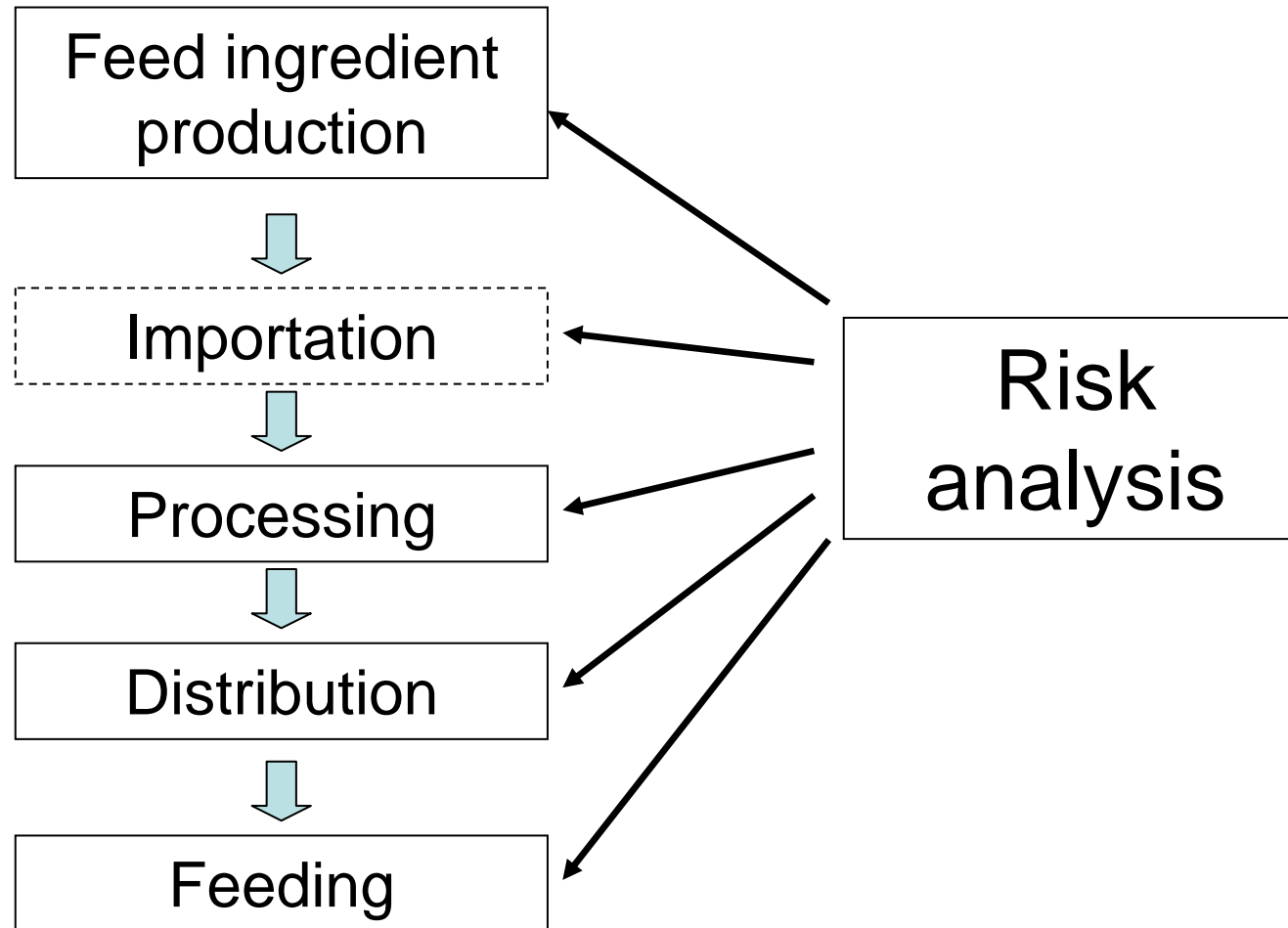
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Hazards of animal health and public health importance



Feed chain approach



2. International standards on feed safety

International standards for individual hazards

- Animal health hazards
OIE Code disease specific chapters
- Food safety hazards
Codex maximum residue limits (MRLs)

OIE Code disease chapters

- Straw and forage from FMD infected countries or zones
- Ruminant-derived MBM or greaves from BSE negligible risk, controlled risk or undermined risk country
- Gelatine and collagen prepared from bones, tallow, dicalcium phosphate, tallow derivatives from BSE negligible risk, controlled risk or undermined risk country
- Feather meal from NAI free or infected countries
- Feather meal from ND free or infected countries

For straw and forage from FMD infected countries or zones

(OIE Terrestrial Animal Health Code Article 8.5.29.)

Vet Authorities should require the presentation of an international vet certificate attesting that these commodities:

1. are free of grossly identifiable contamination with material of animal origin;
2. have been subjected to one of the following treatments, which, in the case of material sent in bales, has been shown to penetrate to the centre of the bale:
 - a) either to the action of steam in a closed chamber such that the centre of the bales has reached a minimum temperature of 80°C for at least 10 minutes,
 - b) or to the action of formalin fumes (formaldehyde gas) produced by its commercial solution at 35-10% in a chamber kept closed for at least 8 hours and at a minimum temperature of 19°C :

OR

3. Have been kept in bond for at least 3 months (under study) before being released for export.

Ruminant-derived MBM or greaves from BSE negligible risk, controlled risk or undetermined risk country
(OIE Terrestrial Animal Health Code Article 11.6.13.)

1. Ruminant-derived MBM or greaves which originate from BSE negligible risk country or zone with indigenous case of BSE, should not be traded if such products were derived from cattle born before the date of feed ban.
2. Ruminant-derived MBM or greaves which originate from BSE controlled risk or undetermined risk country or zone should not be traded between countries.

For feather meal from NAI free or infected countries or zones

(OIE Terrestrial Animal Health Code Article 10.4.25.)

Vet Authorities should require the presentation of an international vet certificate attesting that these commodities:

1. were processed in a NAI free country, zone or compartment from poultry which were kept in a NAI free country, zone or compartment from the time they were hatched until the time of slaughter or for at least the 21 days preceding slaughter; or
2. have been processed either;
 - a) moist heat at a minimum temperature of 118°C for minimum of 40 minutes; or
 - b) with a continuous hydrolysing process under at least 3,79 bar of pressure with steam at a minimum temperature of 122°C for a minimum of 15 minutes;

AND

3. the necessary precautions were taken to avoid contact of the commodity with any source of NAI virus.

Codex MRLs are set for:

1. Alfalfa fodder
2. Alfalfa forage (green)
3. Cotton seed
4. Fodder beet
5. Fodder beet leaves or tops
6. Fodder of cereal grains
7. Straw of cereal grains
8. Forage crops (green)
9. Hay or fodder (dry) of grasses
10. Bean fodder
11. Pea hay or pea fodder
12. Soya bean fodder
13. Peanut fodder
14. Peanut forage (green)
15. Clover hay or fodder
16. Maize fodder
17. Maize forage
18. Mint hay
19. Oat straw and fodder
20. Pineapple fodder
21. Pineapple forage
22. Rice straw and fodder
23. Rye forage (green)
24. Rye straw and fodder
25. Sorghum forage (green)
26. Sorghum forage (dry)
27. Sorghum straw and fodder
28. Sugar cane fodder
29. Sugar cane forage
30. Sunflower forage
31. Triticale straw and fodder
32. Wheat forage
33. Wheat straw and fodder

Codex MRLs (an example)

Alfalfa fodder				
<i>Pesticide</i>	<i>Value</i>		<u><i>Symbols</i></u>	<i>Footnote</i>
AZINPHOS-METHYL	<i>MRL (mg/kg)</i>	10		
CARBOFURAN	<i>MRL (undef)</i>	10		
CHLORPYRIFOS	<i>MRL (undef)</i>	5		
CLETHODIM	<i>MRL (mg/kg)</i>	10		
DIQUAT	<i>MRL (mg/kg)</i>	100		
DISULFOTON	<i>MRL (mg/kg)</i>	5	(dry wt)	
FENVALERATE	<i>MRL (mg/kg)</i>	20	dry wt	
GLYPHOSATE	<i>MRL (undef)</i>	500		
INDOXACARB	<i>MRL (undef)</i>	60		
METHOMYL	<i>MRL (mg/kg)</i>	20		
PERMETHRIN	<i>MRL (mg/kg)</i>	100	dry wt	

International standards on animal feed in general

- Codex Code of Practice on Good Animal Feeding (CAC/RCP 54-2004)
- OIE Terrestrial Animal Health Code Chapter 6.3. - The Control of Hazards of Animal Health and Public Health Importance in Animal Feed
- OIE Aquatic Animal Health Code Chapter 4.5. – Control of aquatic animal health hazards in aquatic animal feed

3. Regulatory frameworks on feed safety

Main players in feed safety

- Competent authority
- Official inspection agency
- Feed operators (manufacturers, importers, distributors, ...)
- Associations

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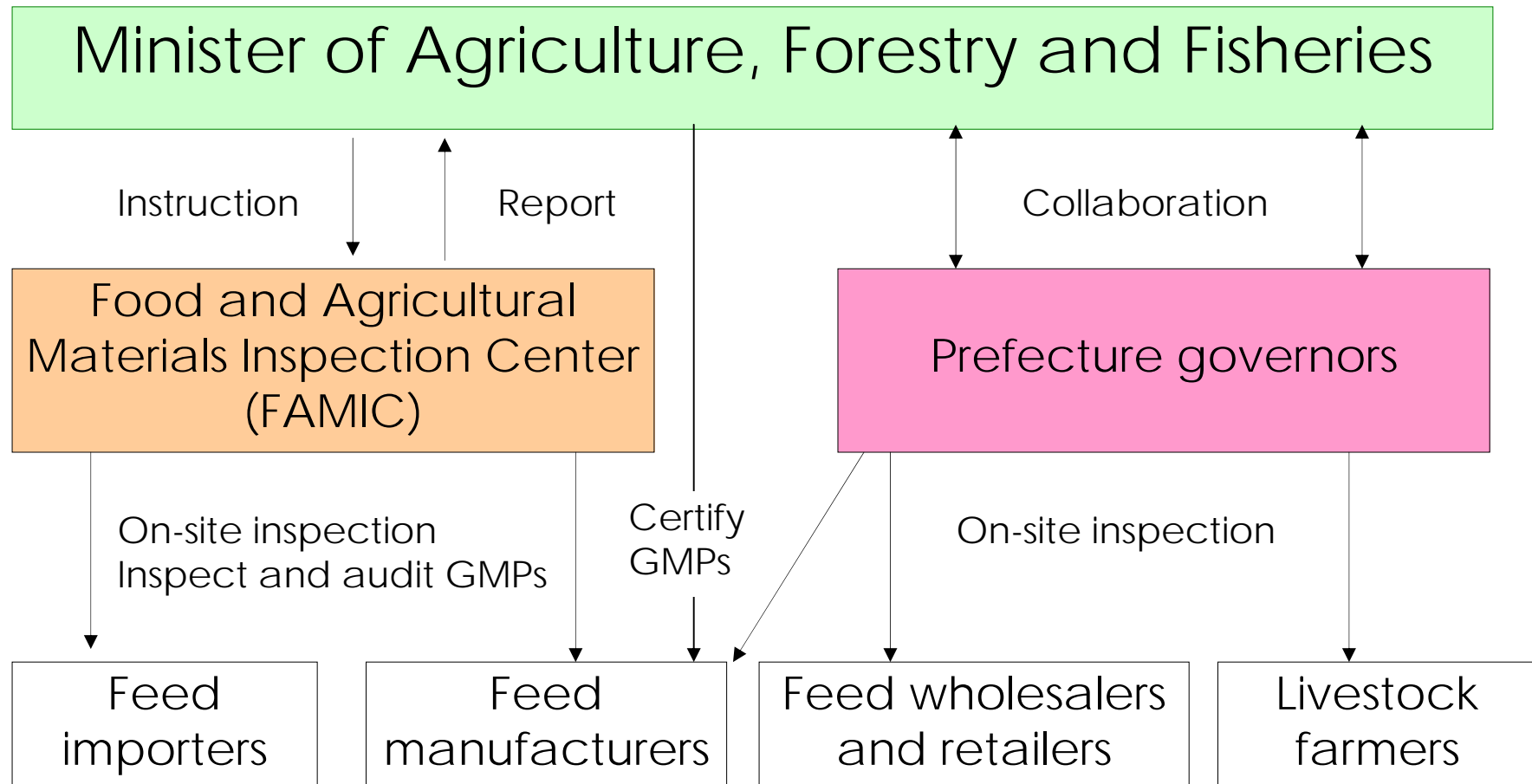
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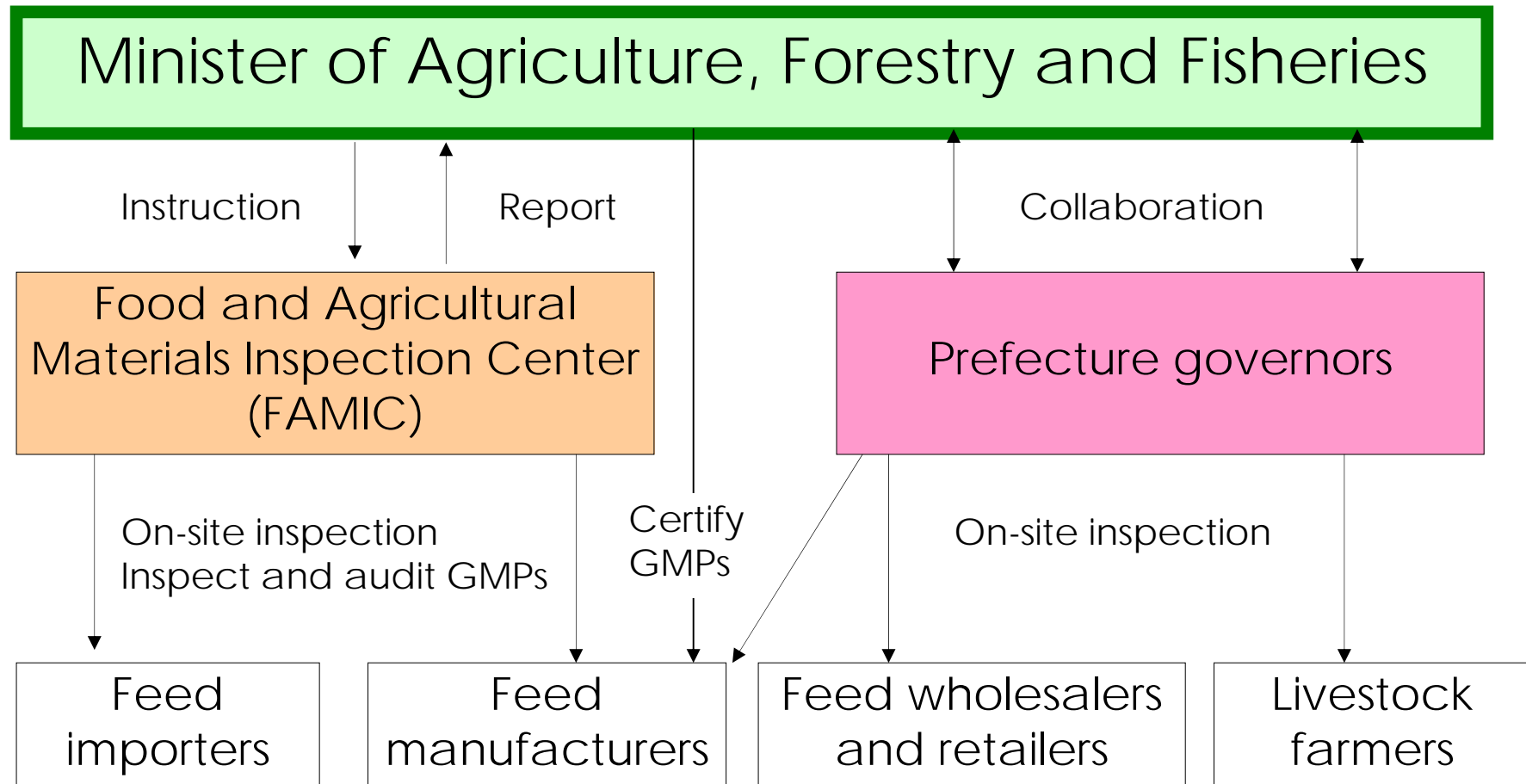
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Regulatory framework in Japan

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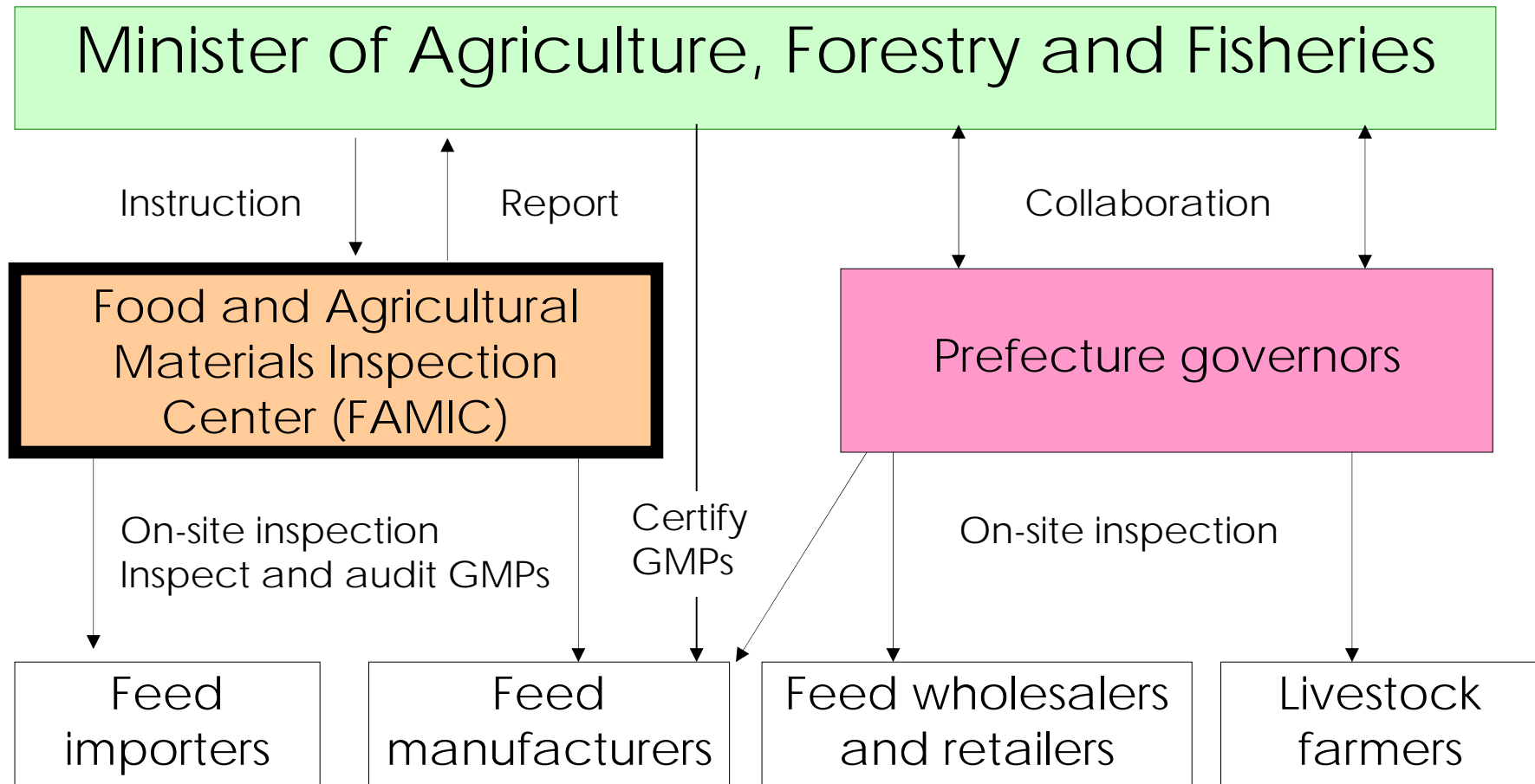
Regulatory framework in Japan



Regulatory framework in Japan

- **MAFF sets regulatory standards, guidelines and GMP programs in accordance with the Feed Safety Law.**

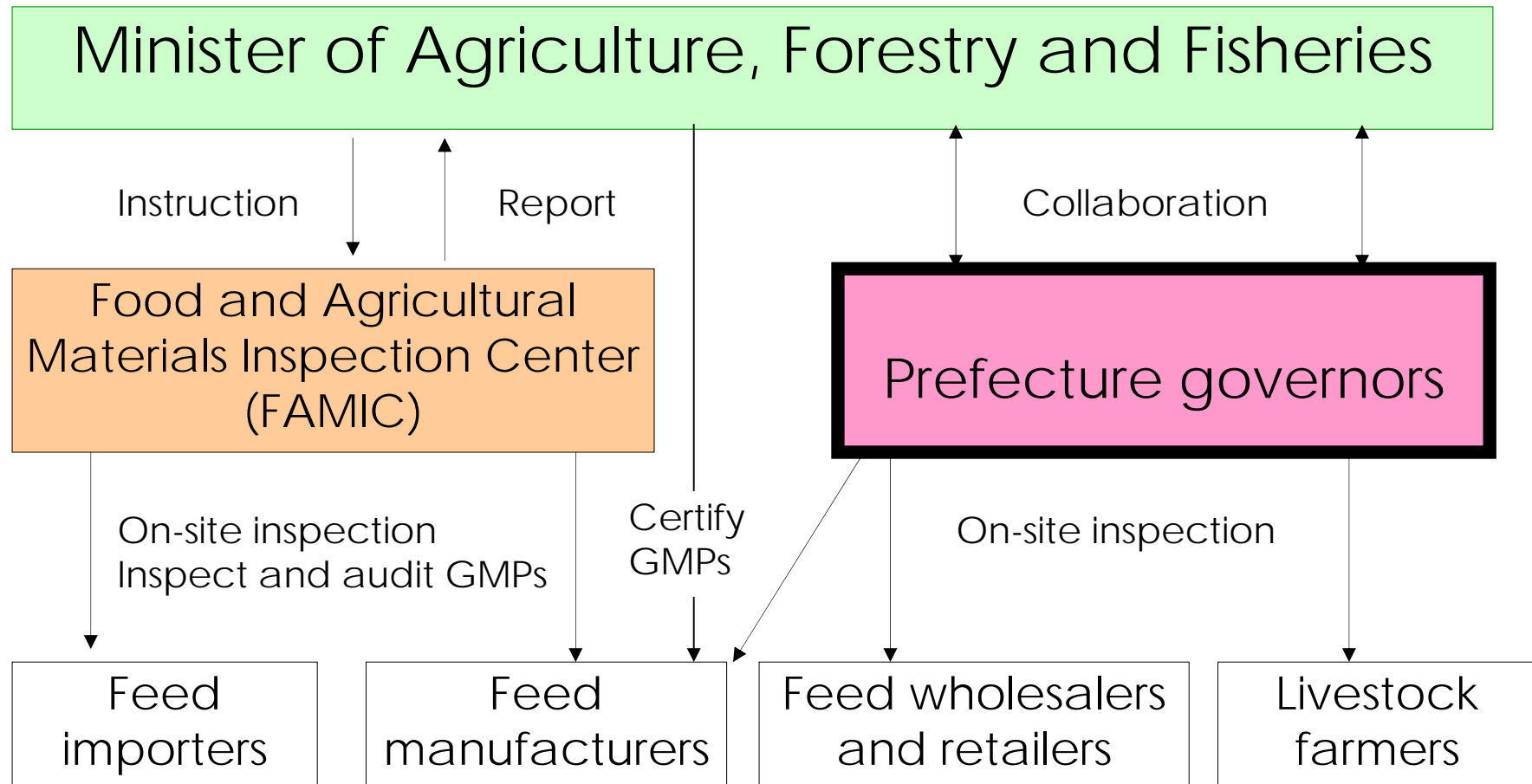
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- MAFF sets regulatory standards, guidelines and GMP programs in accordance with the Feed Safety Law.
- **FAMIC inspects feed importers, manufacturers, and inspects and audits manufacturers applying GMP.**

Regulatory framework in Japan



Regulatory framework in Japan

- MAFF sets regulatory standards, guidelines and GMP programs in accordance with the Feed Safety Law.
- FAMIC inspects feed importers, manufactures, inspect and audit manufactures applying GMP.
- **Prefecture governments inspect feed manufacturers and distributors.**

Guidelines set by the MAFF

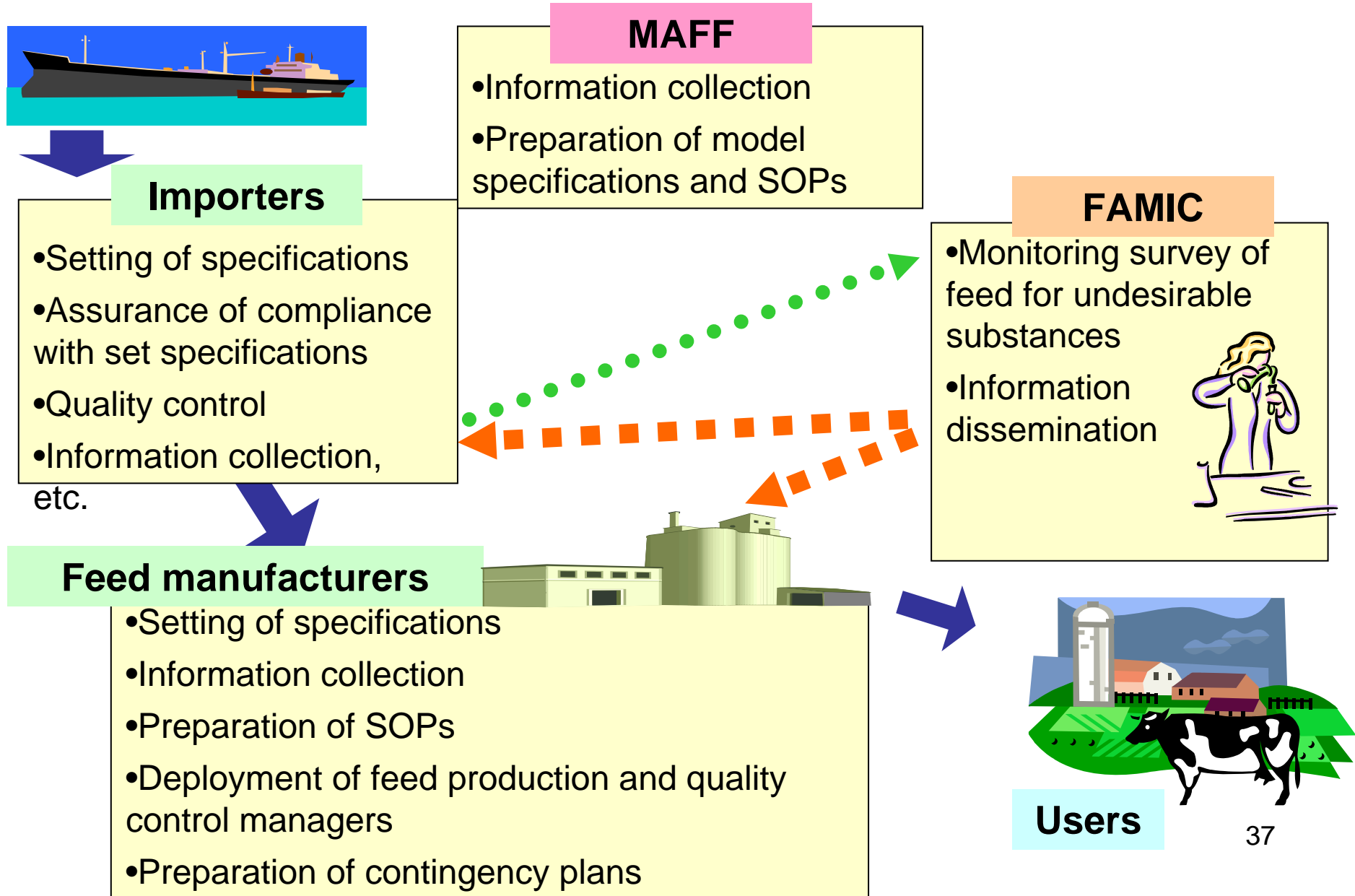
- Guideline for prevention of feed contamination with undesirable substances (2008)
- Guideline for quality control of feed with antimicrobials(2007)
- Guideline for prevention of feed contamination with Salmonella (1998)
- Guideline for prevention of feed contamination with animal proteins(2003)
- Guideline for safety assurance of feed from recycled food waste(2006)

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Guidelines for prevention of contamination of feed with undesirable substances

http://www.famic.go.jp/ffis/feed/tuti/19_14006_2.html



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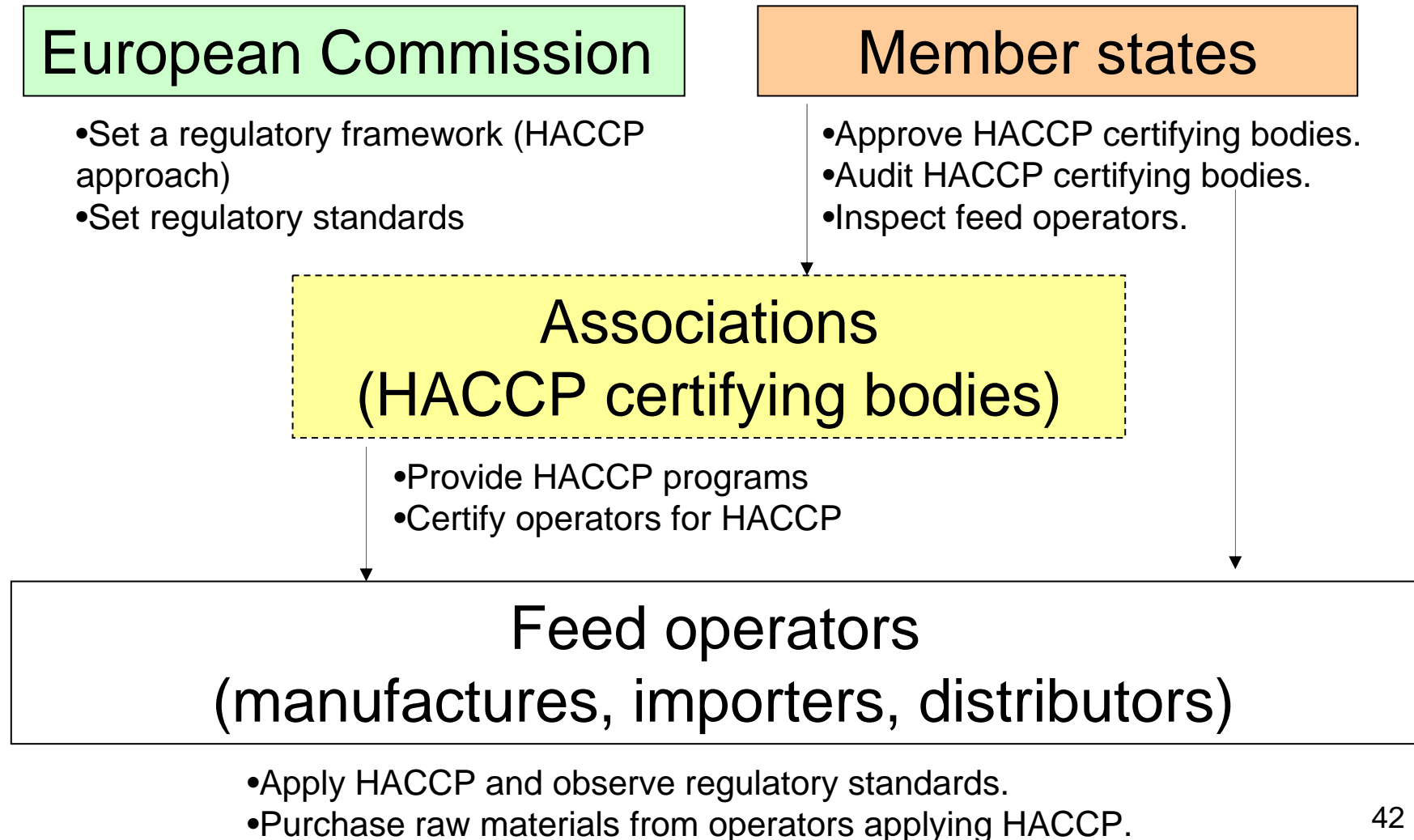
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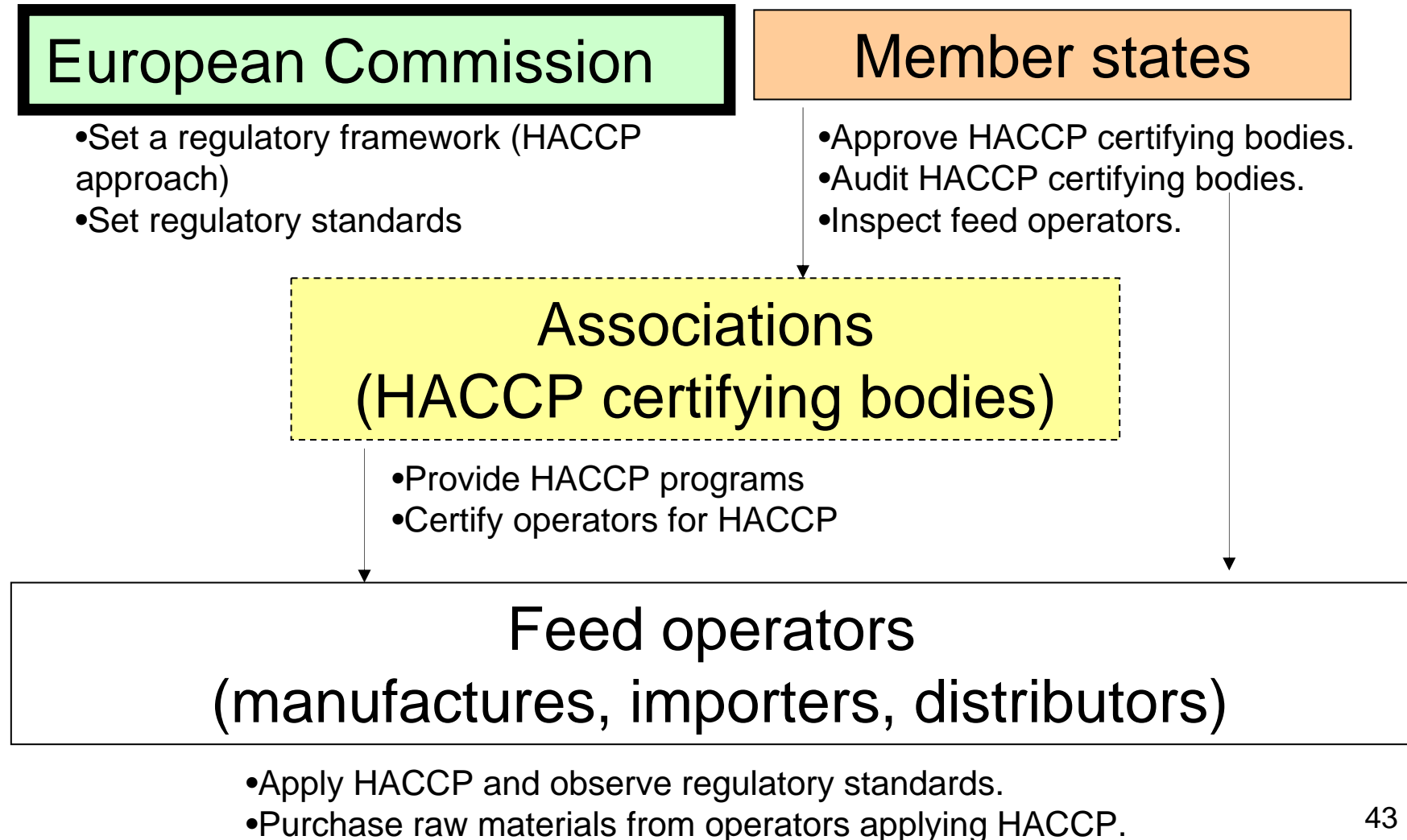
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Regulatory framework in the EU

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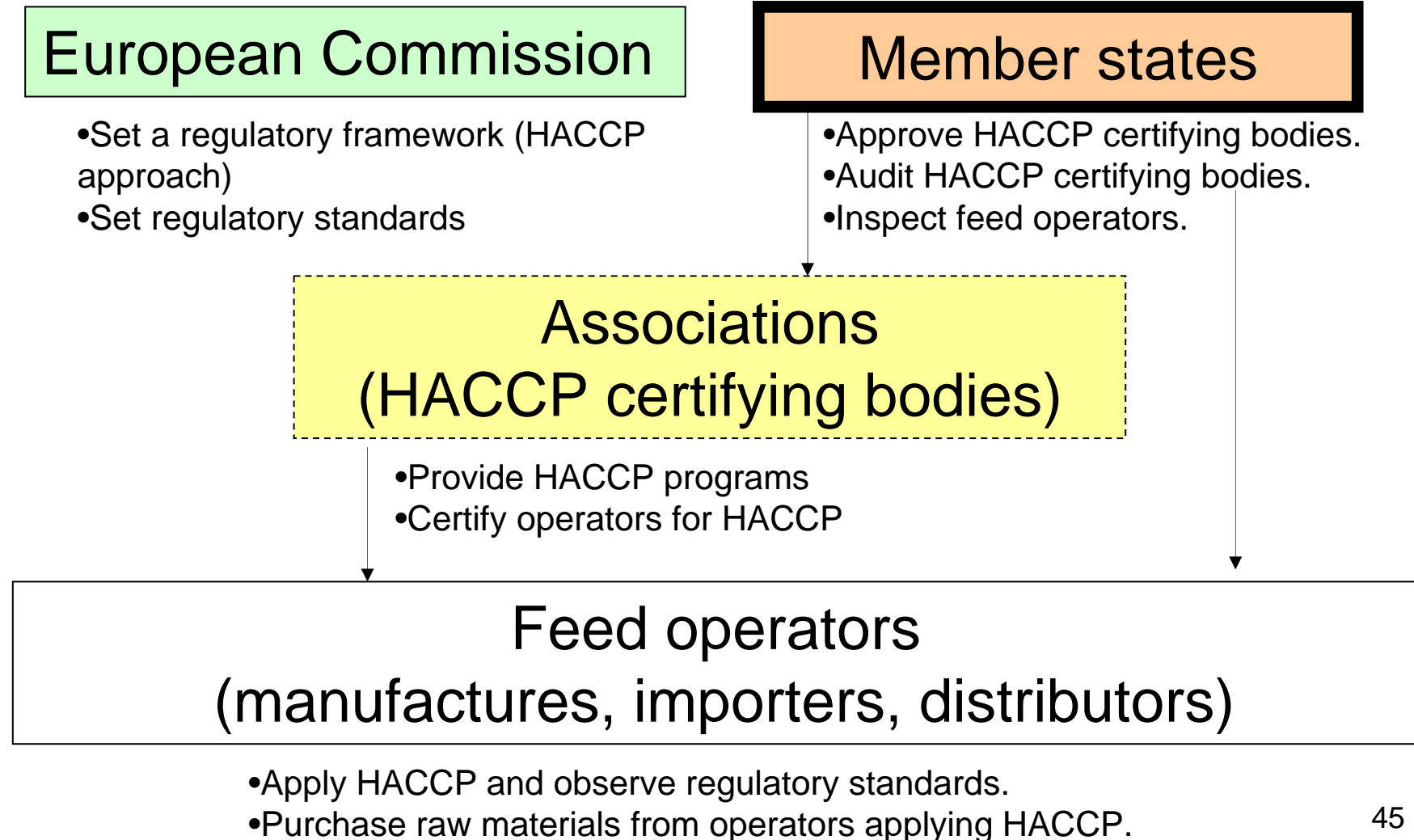


Regulatory framework in the EU

- EC sets a HACCP approach based regulatory framework and regulatory standards.

EC Regulation No. 1831/2003

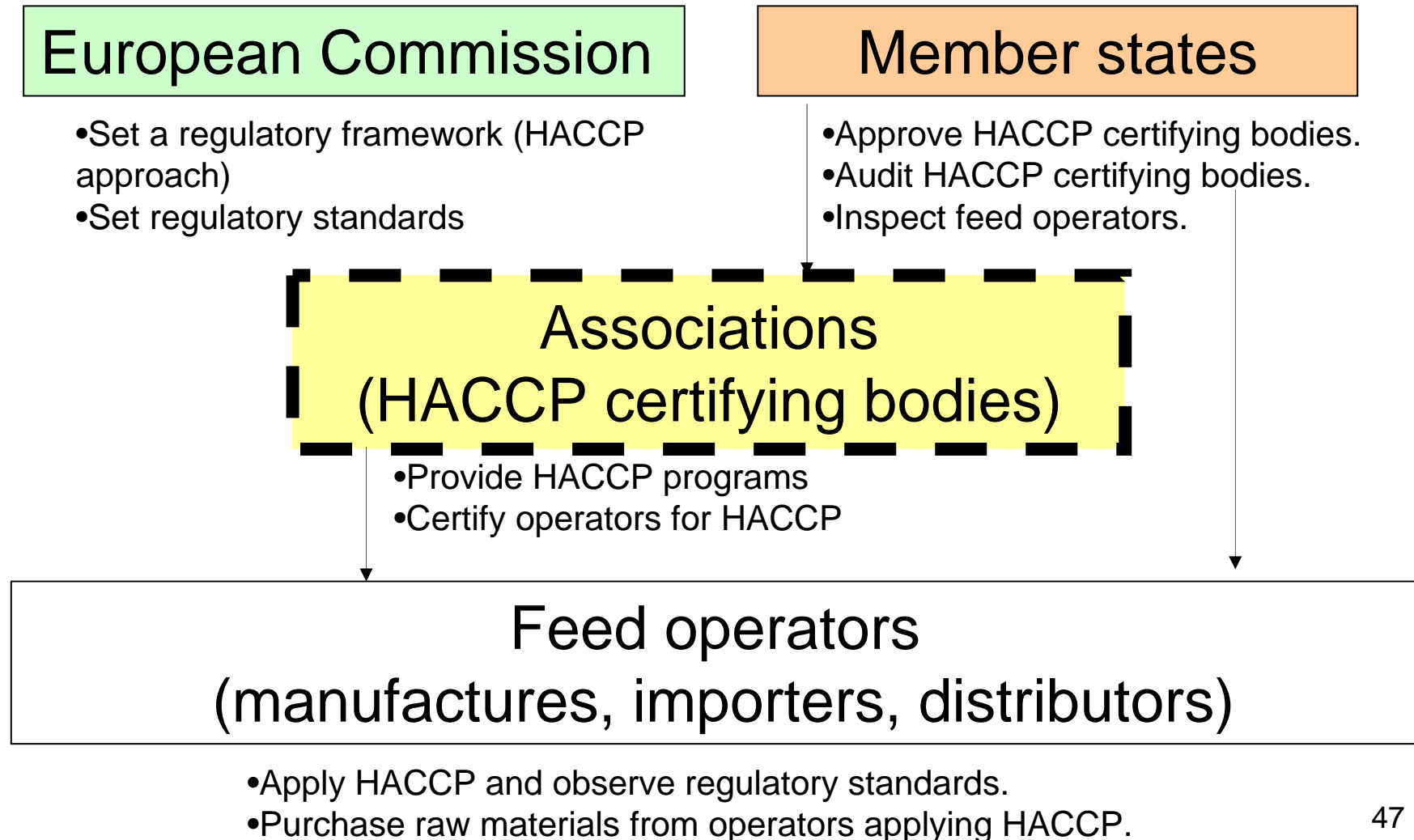
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- EC sets a HACCP approach based regulatory framework and regulatory standards.
- **Member States approve and audit HACCP certifying bodies, and inspect feed operators.**

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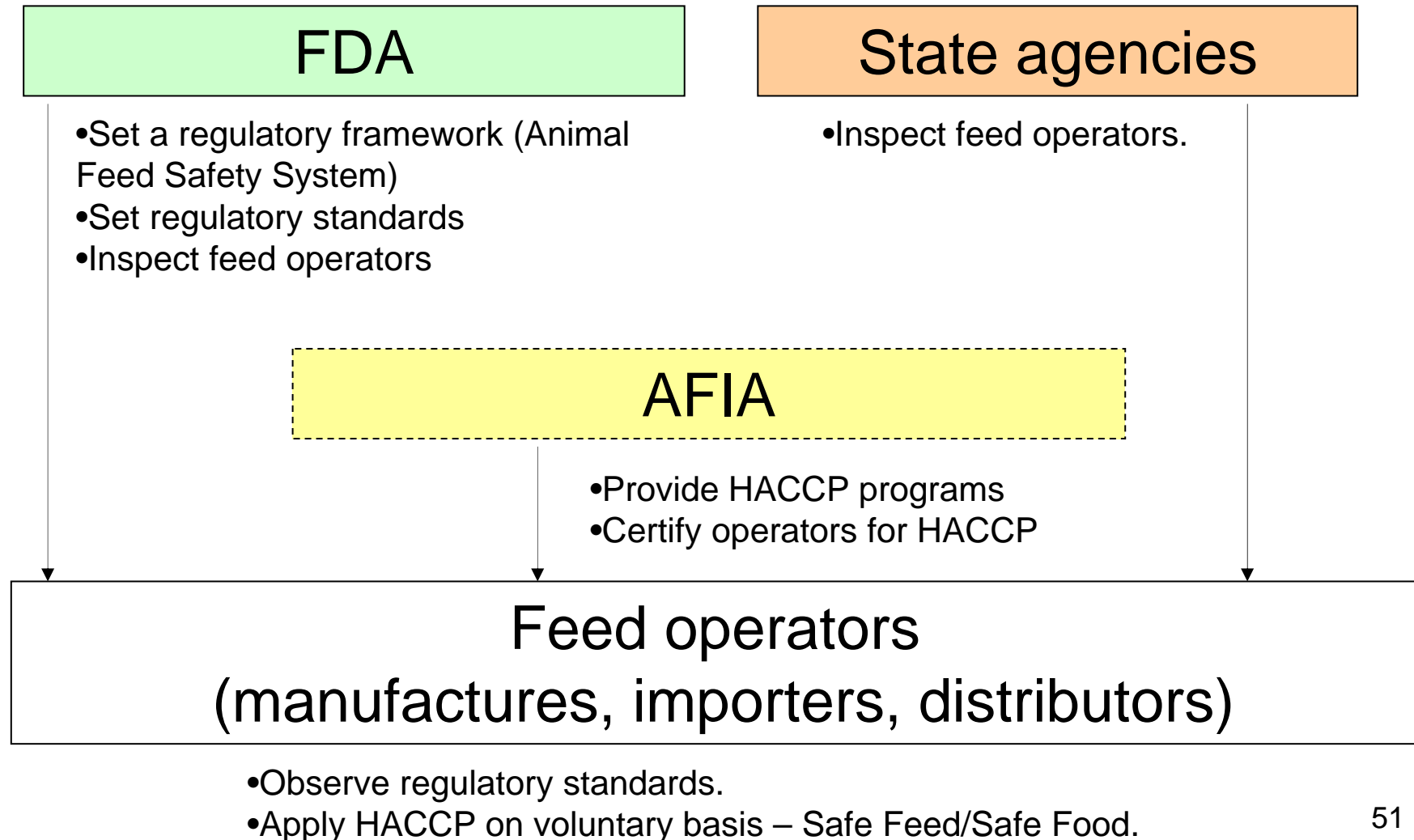
- EC sets a HACCP approach based regulatory framework and regulatory standards.
- MSs approve and audit HACCP certifying bodies, and inspect feed operators.
- **Associations provide HACCP programs, and certify operators applying HACCP.**

HACCP certifying bodies in EU member states

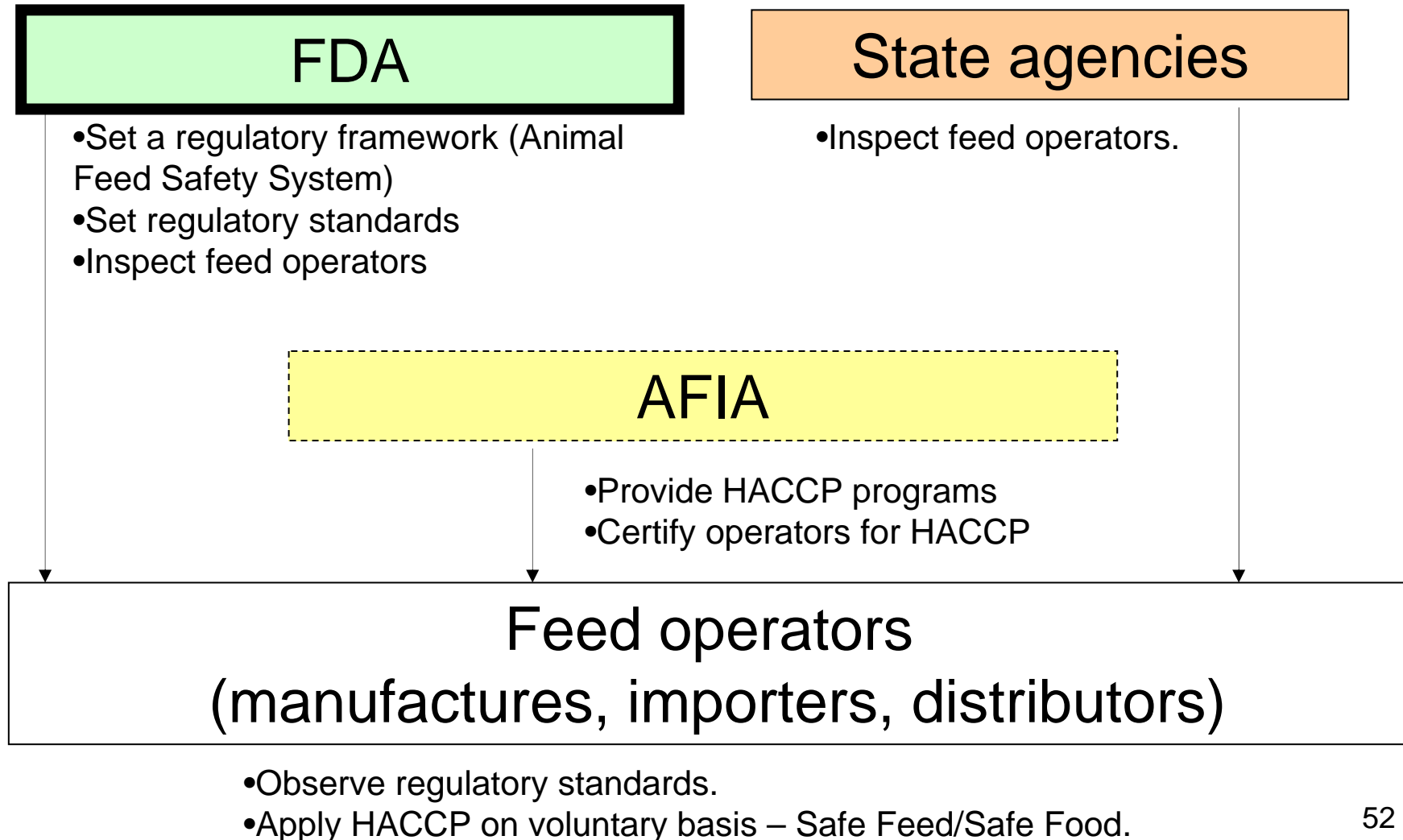
Member states	HACCP certifying bodies	HACCP programs
UK	AIC	UFAS, FEMAS, TASC
Belgium	OVOCOM	GMP
Netherlands	PDV	GMP+B2, GMP+B3
Germany	QS	QS

Regulatory framework in the US

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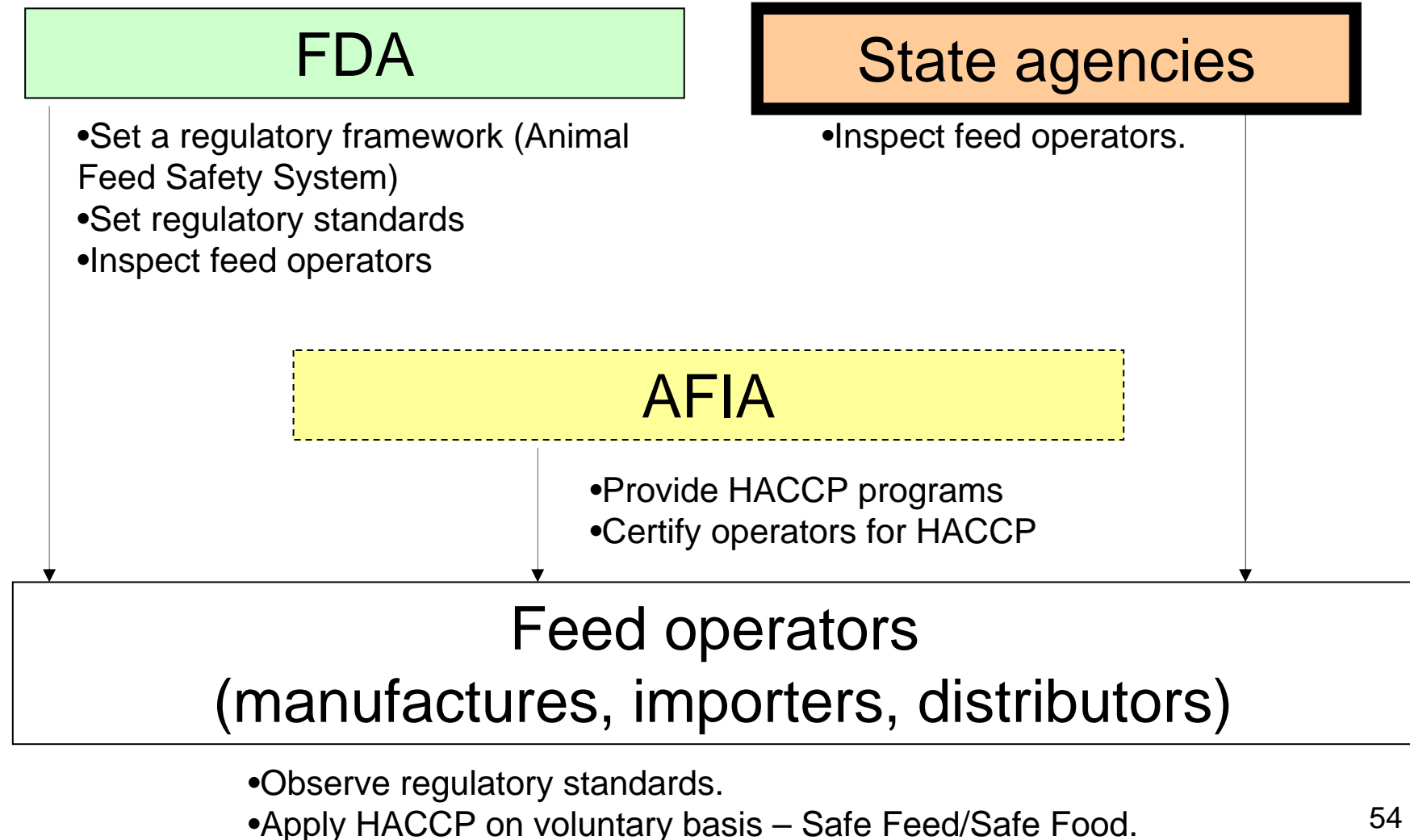
- **FDA sets regulatory standards, and inspects feed operators.**

The Federal Food, Drug and Cosmetic Act

Regulation prohibiting the use of certain cattle materials from all animal feed (2008)

Animal Feed Safety System

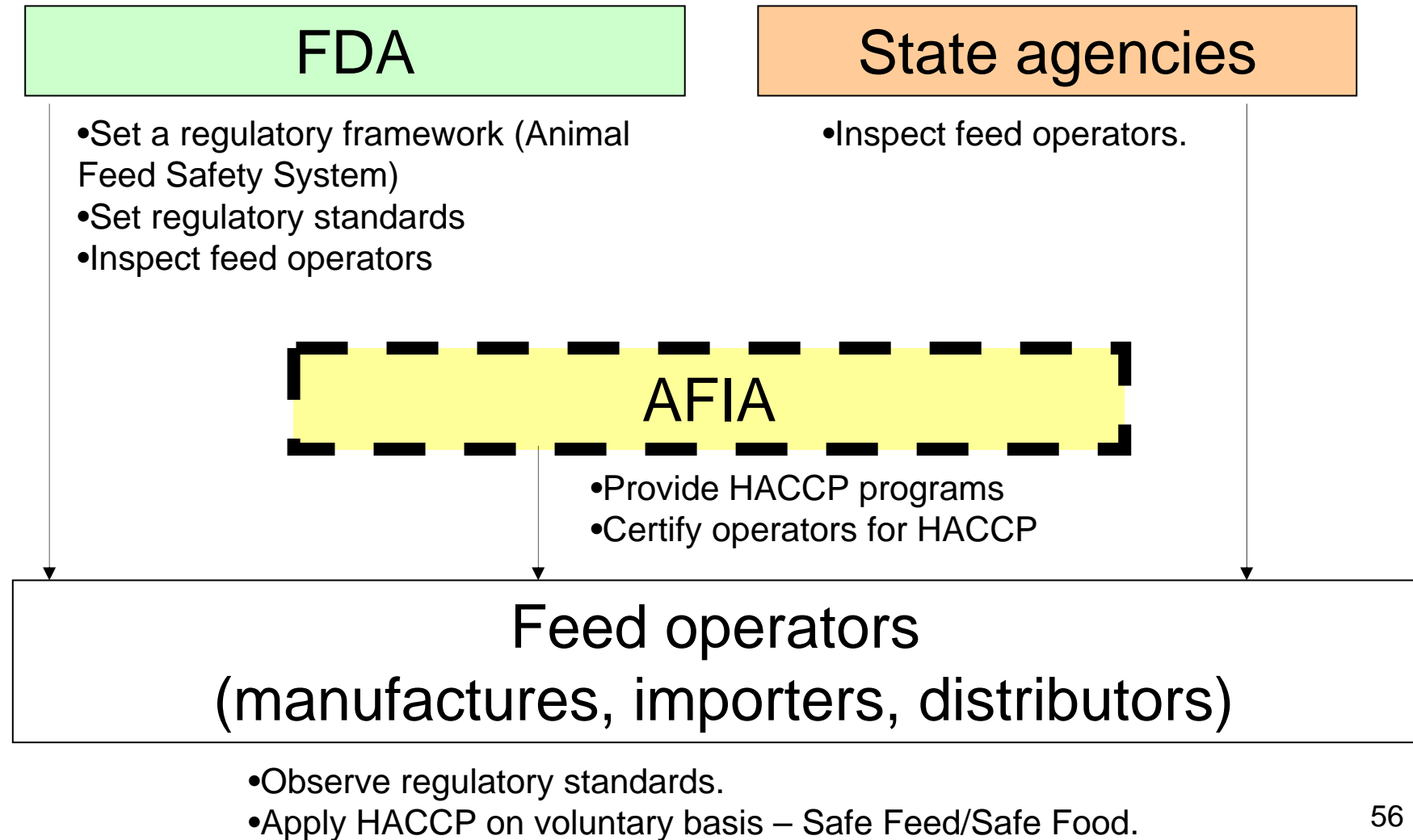
Regulatory framework in the US



Regulatory framework in the US

- FDA sets a regulatory framework (Animal Feed Safety System), regulatory standards, and inspect feed operators.
- **State agencies inspect feed operators.**
- **AAFCO define feed ingredients.**

Regulatory framework in the US

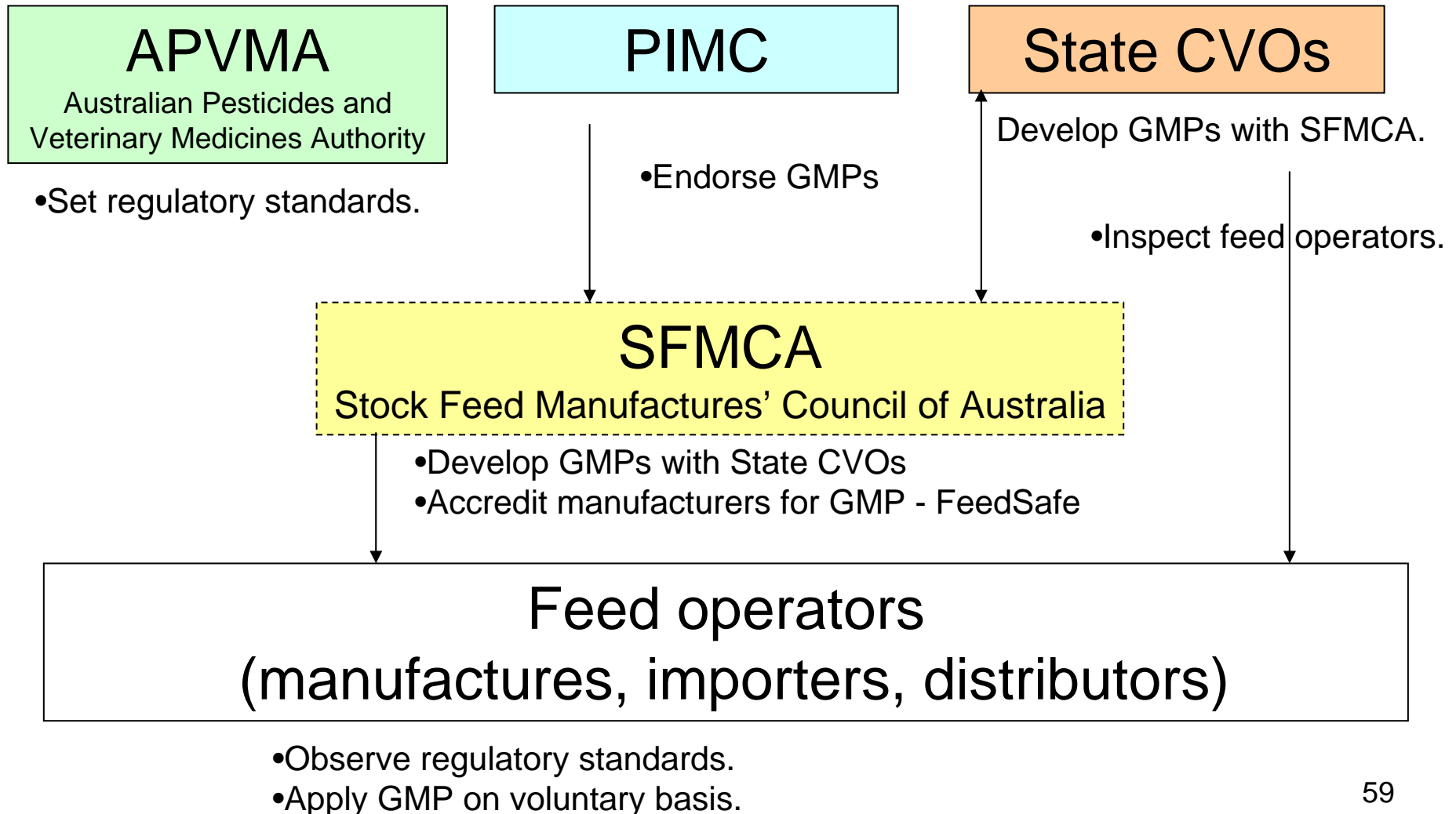


Regulatory framework in the US

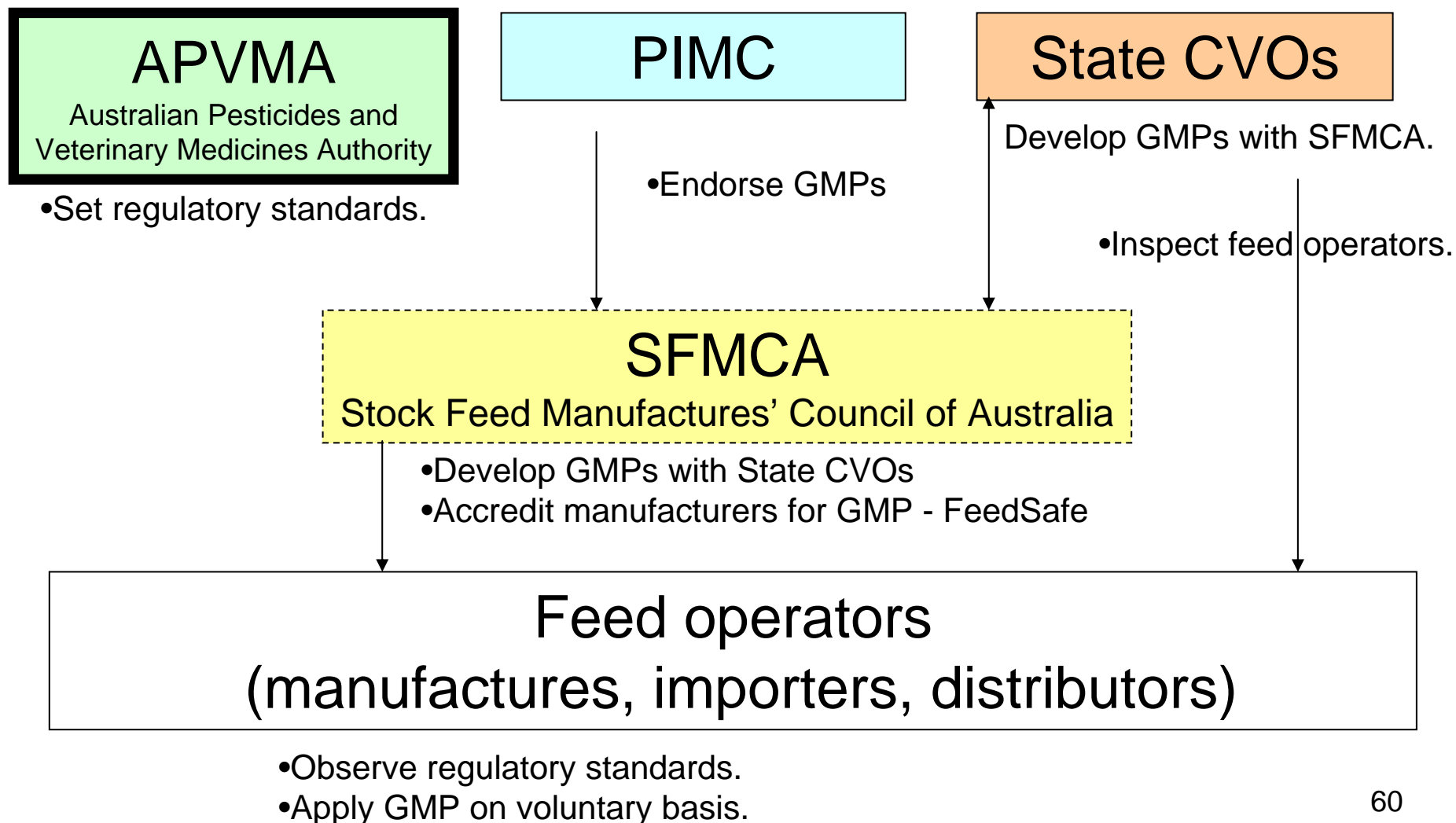
- FDA sets a regulatory framework (Animal Feed Safety System), regulatory standards, and inspect feed operators.
- State agencies inspect feed operators.
- AAFCO define feed ingredients.
- **AFIA develops HACCP programs and certify operators applying HACCP on voluntary basis (Safe Feed/Safe Food).**

Regulatory framework in Australia

Regulatory framework in Australia



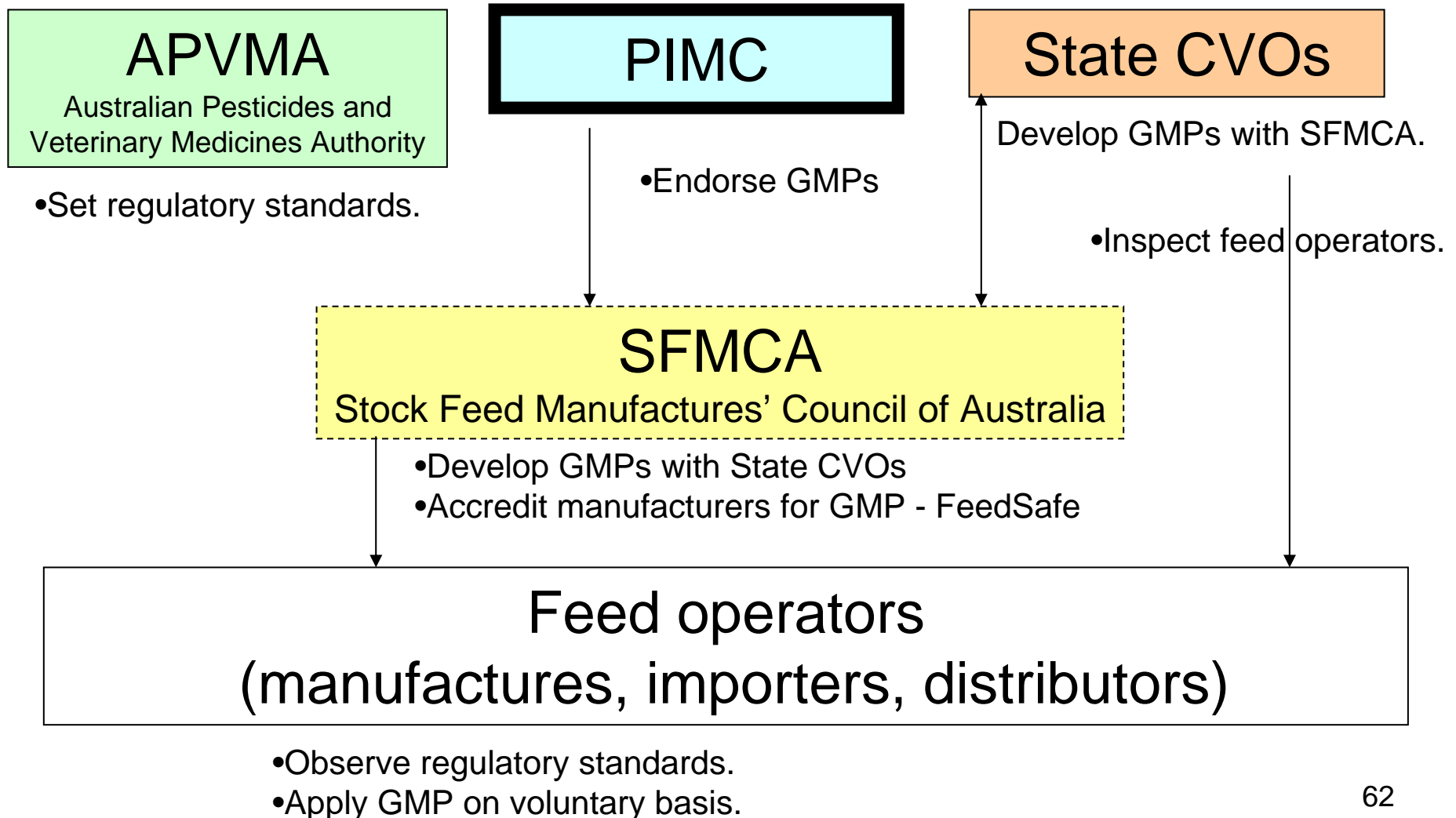
Regulatory framework in Australia



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- **APVMA sets regulatory standards.**

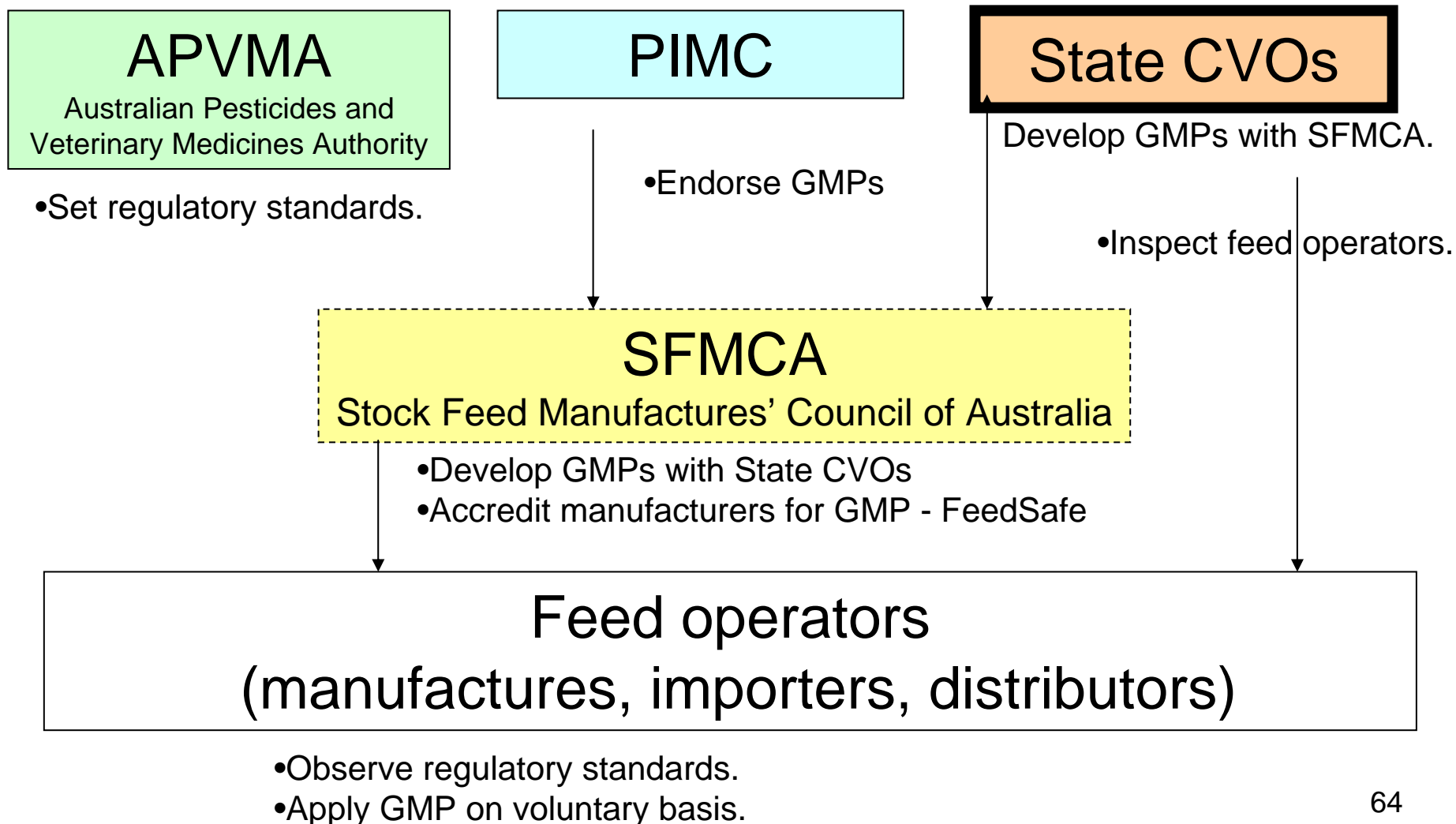
Regulatory framework in Australia



Regulatory framework in Australia

- APVMA sets regulatory standards.
- **Primary Industries Ministerial Council endorse GMPs.**

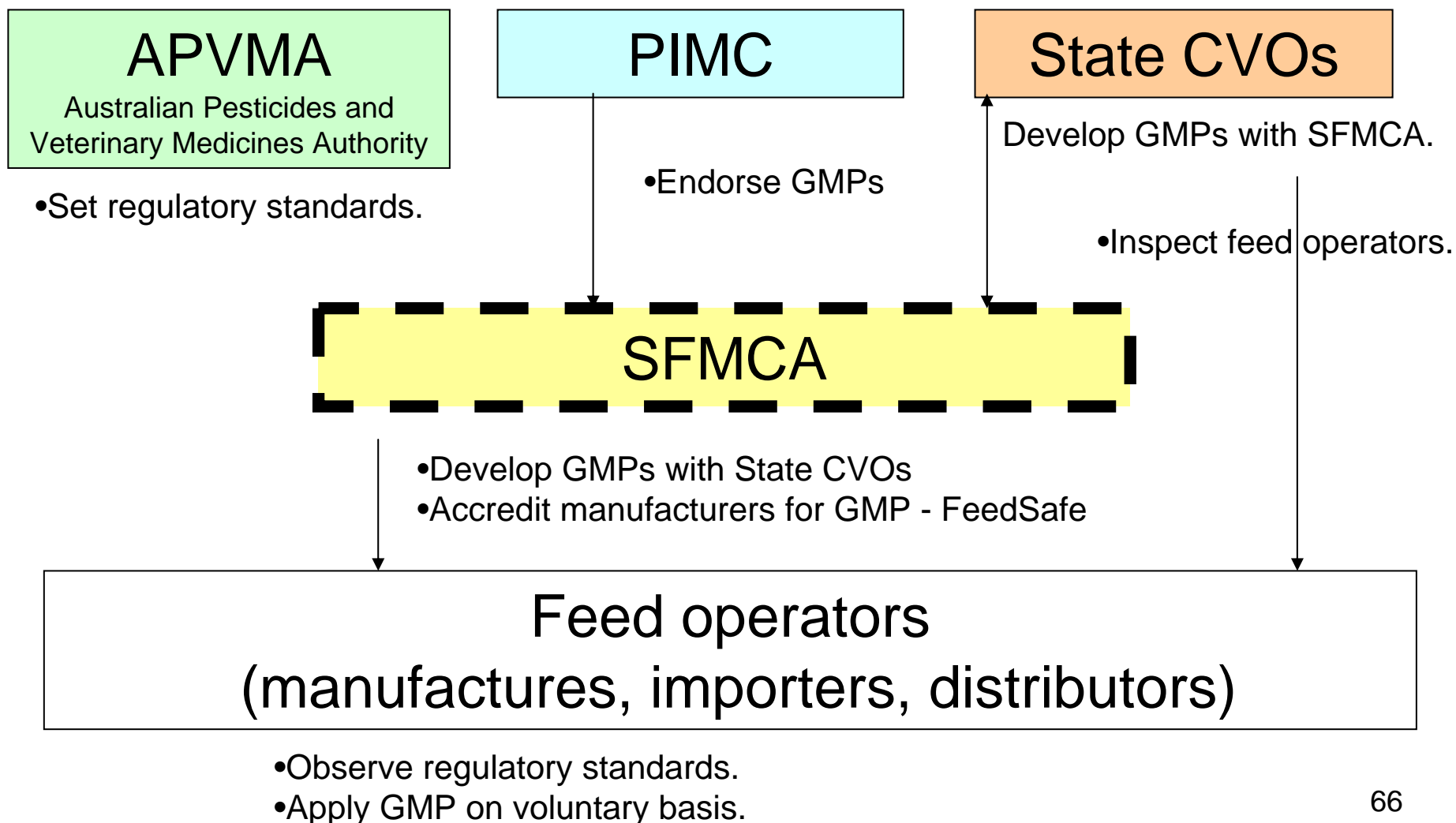
Regulatory framework in Australia



Regulatory framework in Australia

- APVMA sets regulatory standards.
- Primary Industries Ministerial Council endorse GMPs.
- **State CVOs inspect feed operators and develop GMPs with SFMCA.**

Regulatory framework in Australia



Regulatory framework in Australia

- APVMA sets regulatory standards.
- Primary Industries Ministerial Council endorse GMPs.
- State CVOs inspect feed operators and develop GMPs with SFMCA.
- **SFMCA develops GMPs with State CVOs, and accredit feed operators applying GMP on voluntary basis (FeedSafe).**

International trends

(based on Japan, EU, US and Australia)

- Product based approach →
Process based approach
- Risk based approach
- Official certification →
Certification by associations

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おしまい

