



Food and Agriculture Organization of the United Nations



Towards Sustainable Animal Diets

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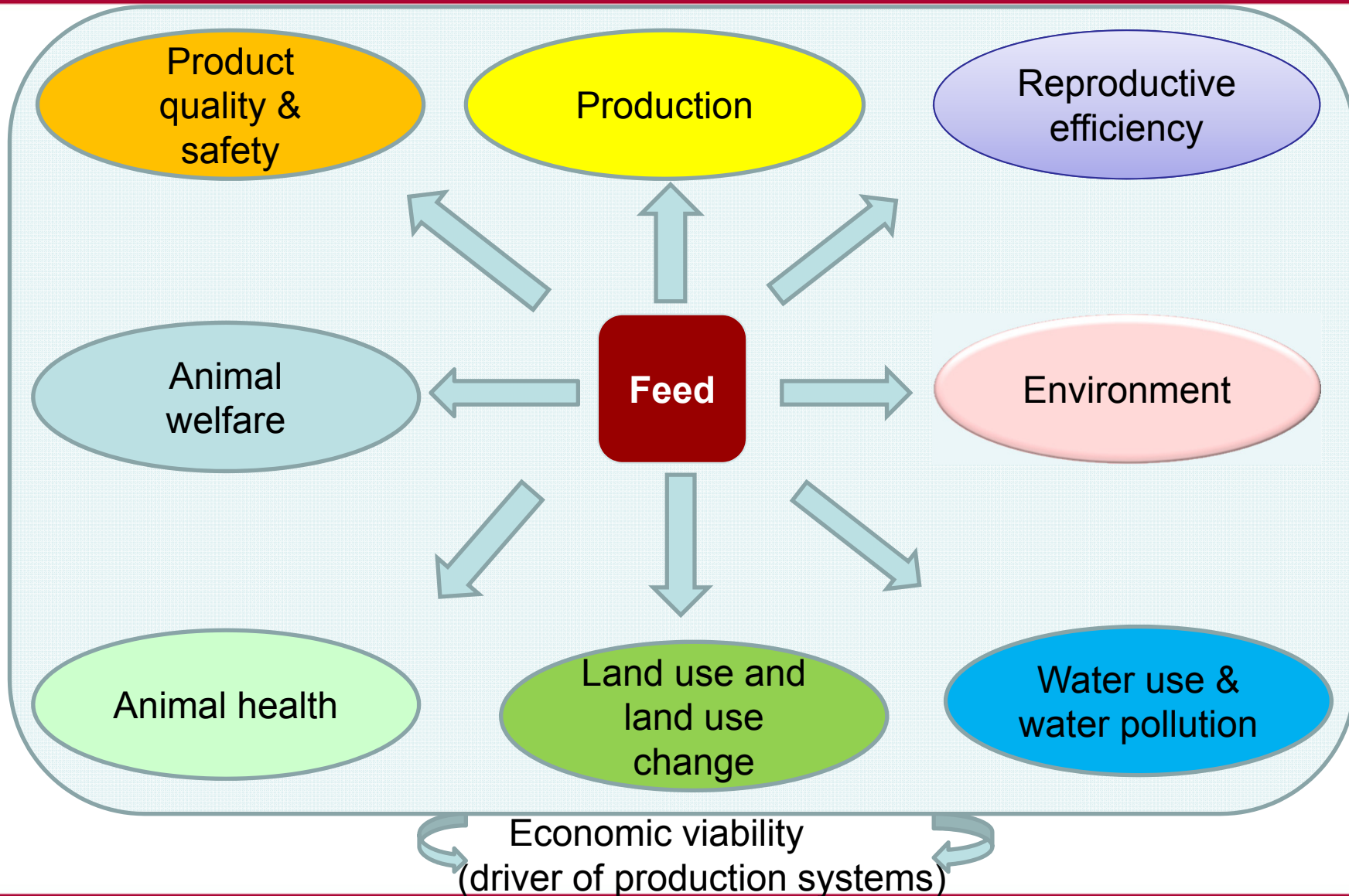


Outline of the presentation

- What is the need of a new concept
- What is the concept of Sustainable Animal Diets (SAD)
- What is new in this concept
- Some options for its implementation



Feed: place in sustainable livestock development





Feed Production and the environment

- Area dedicated to feed-crops
 - 33% of total arable land
- Irrigation of feed crops consumes
 - Over 90% of total global human water use in livestock sector
- Production, processing and transport of feed account
 - 45% of GHG from livestock sector
- N₂O through the fertilization of feed crops & deposition of manure on pastures
 - represent together 50% of feed emissions = 25% of livestock sector's total emissions
- An increase in feed digestibility of 10% units
 - decrease GHG emission/kg of milk or meat by 25%



IS STATUS QUO AN OPTION?

- Approximately 140 million tonnes of coarse grains used for biofuel production
- Increased volatility in price of feed
- High cost of feed
- Feed driven land use change
- Currently 1/3 of total grain production goes for livestock feed

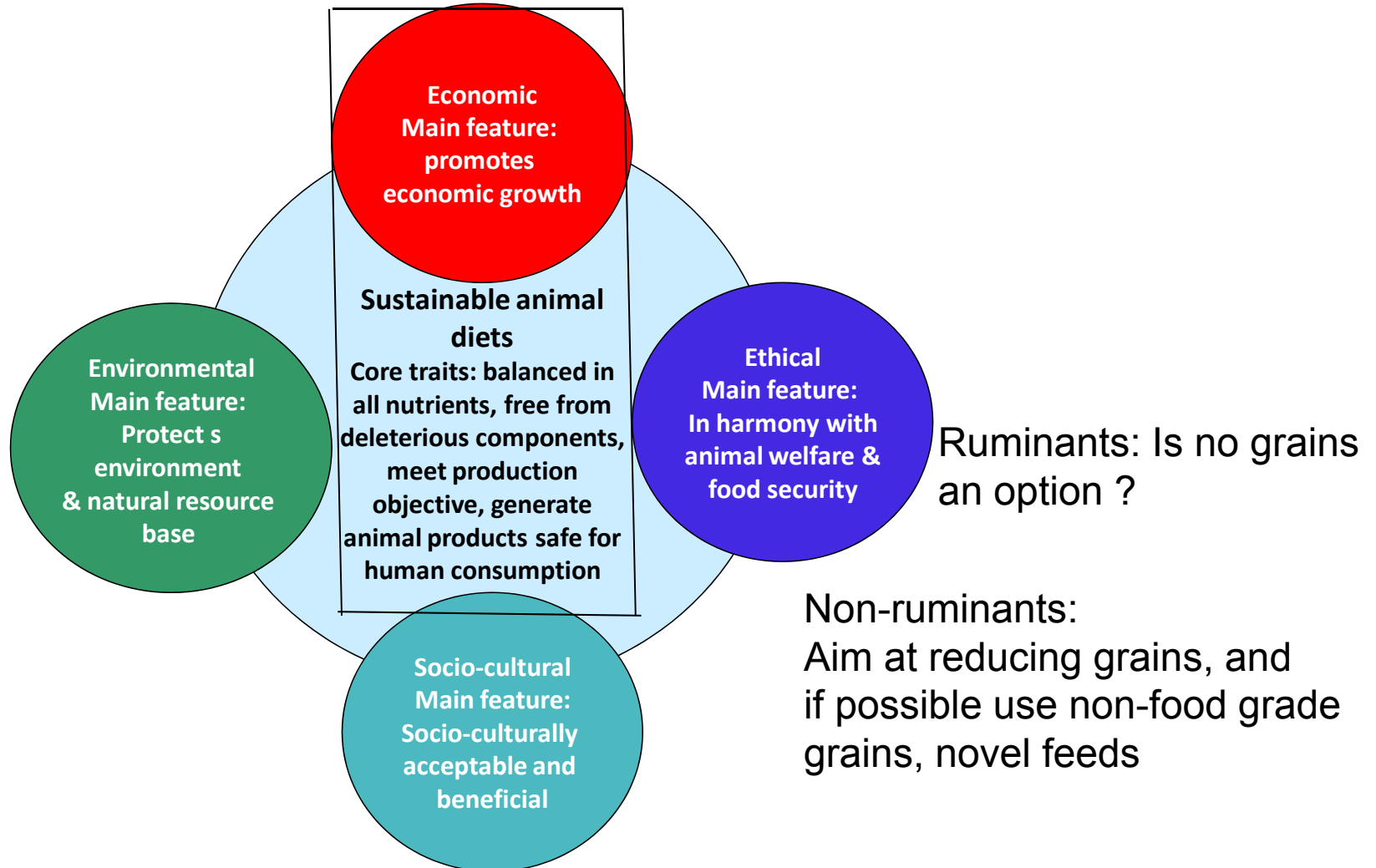
Feed and feeding must change

A holistic view of how this should happen is necessary



Framework of sustainable animal diets

Current status in most situations





What is new in the concept

- a thematic focus -- improving feed (nutrient) use efficiency while conserving the environment, biodiversity and natural resources;
- multi-dimensional scope, embracing socio-cultural, ethical and environmental dimensions in addition to the economic one;
- an action-oriented holistic approach, targeting change in practices; and
- multi-stakeholder participation, harnessing synergies and complementarities.



Objectives of the survey

- Prioritise the main constituent elements of the concept; and
- Take opinion on how to translate this concept into action by integrating its elements/components into sound management practices.



Survey results

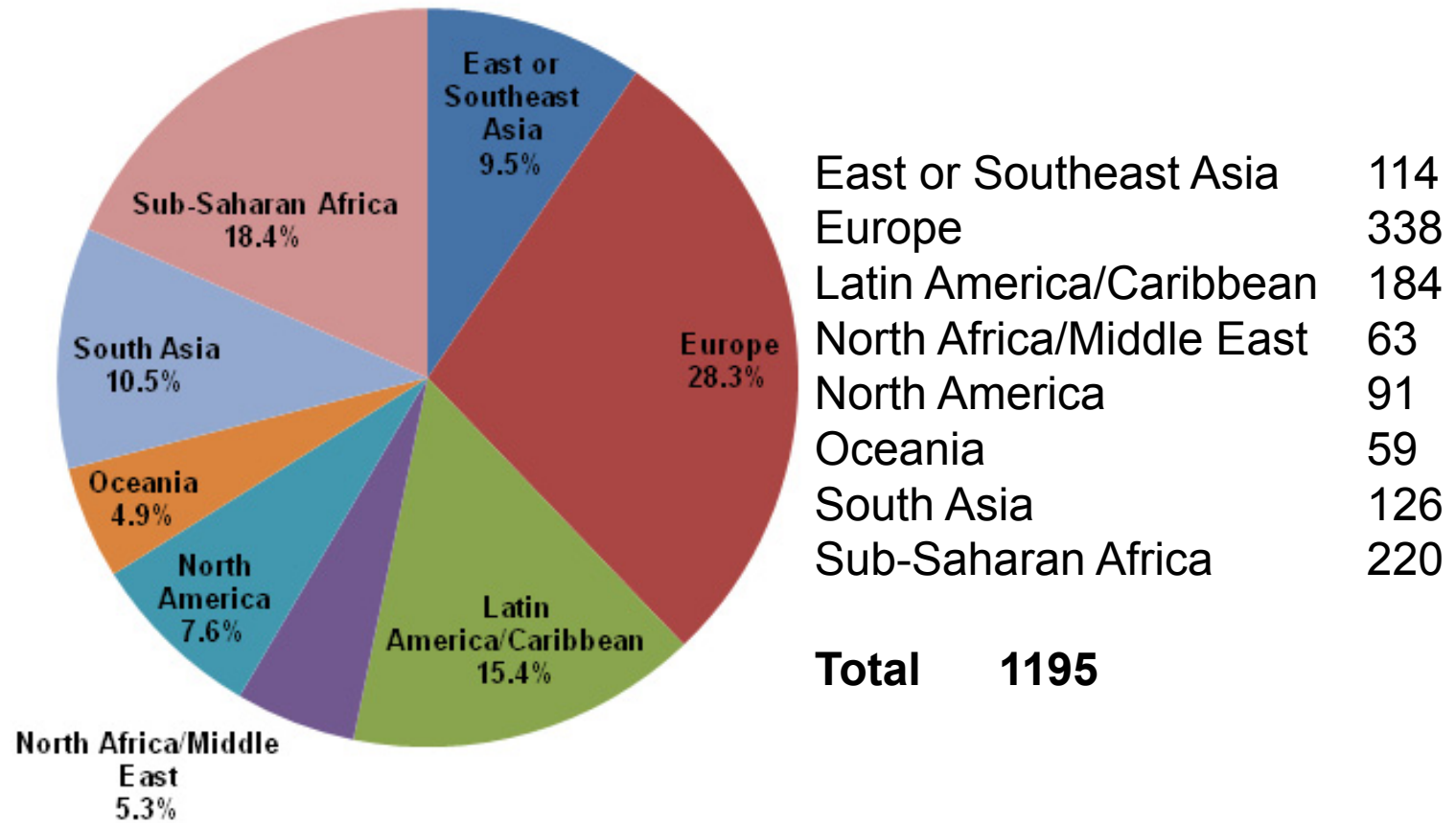
- Global analysis
- Region-wise analysis
- Sector-wise analysis



Global analysis



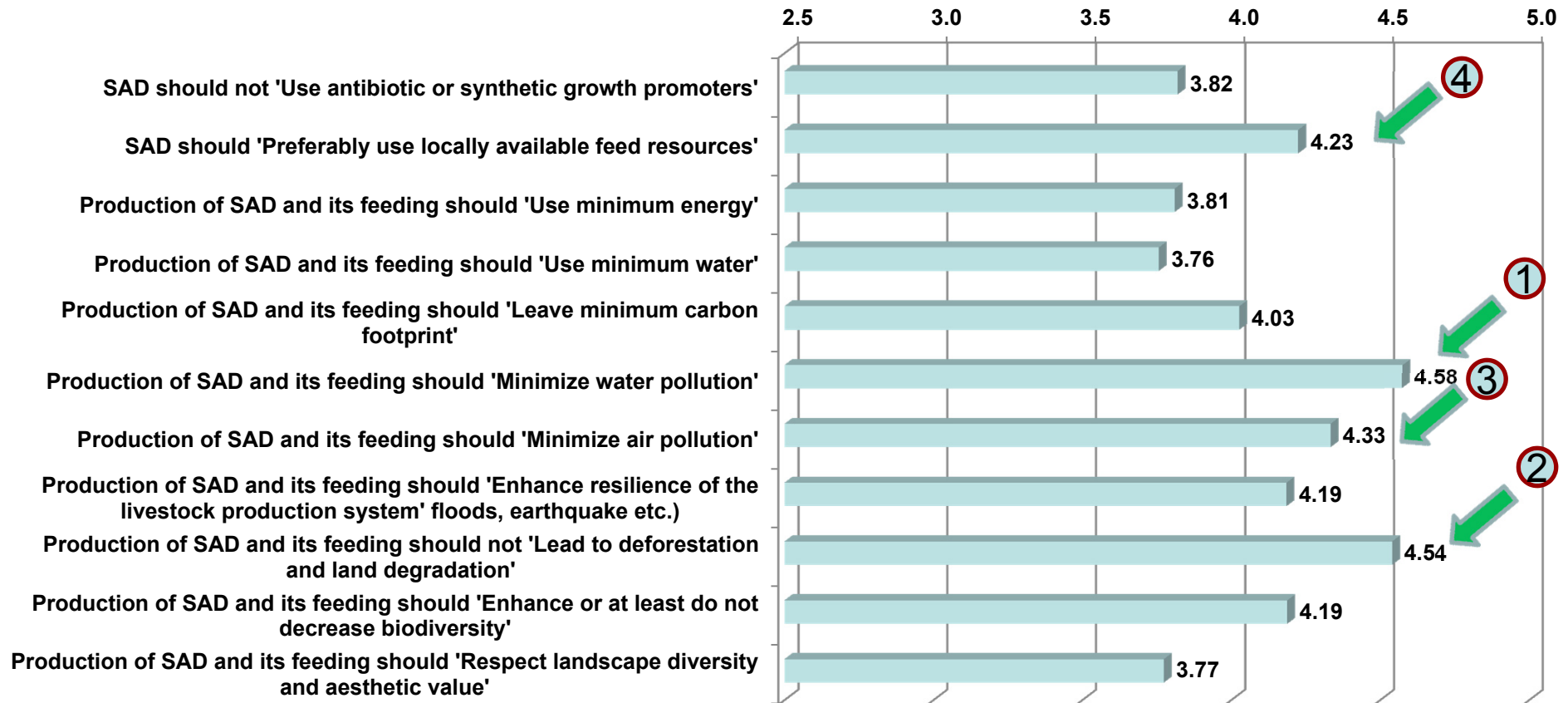
Region-wise Distribution of Respondents





Relative importance of SAD elements that aim to protect environment and natural resource base (Planet dimension of the sustainability)

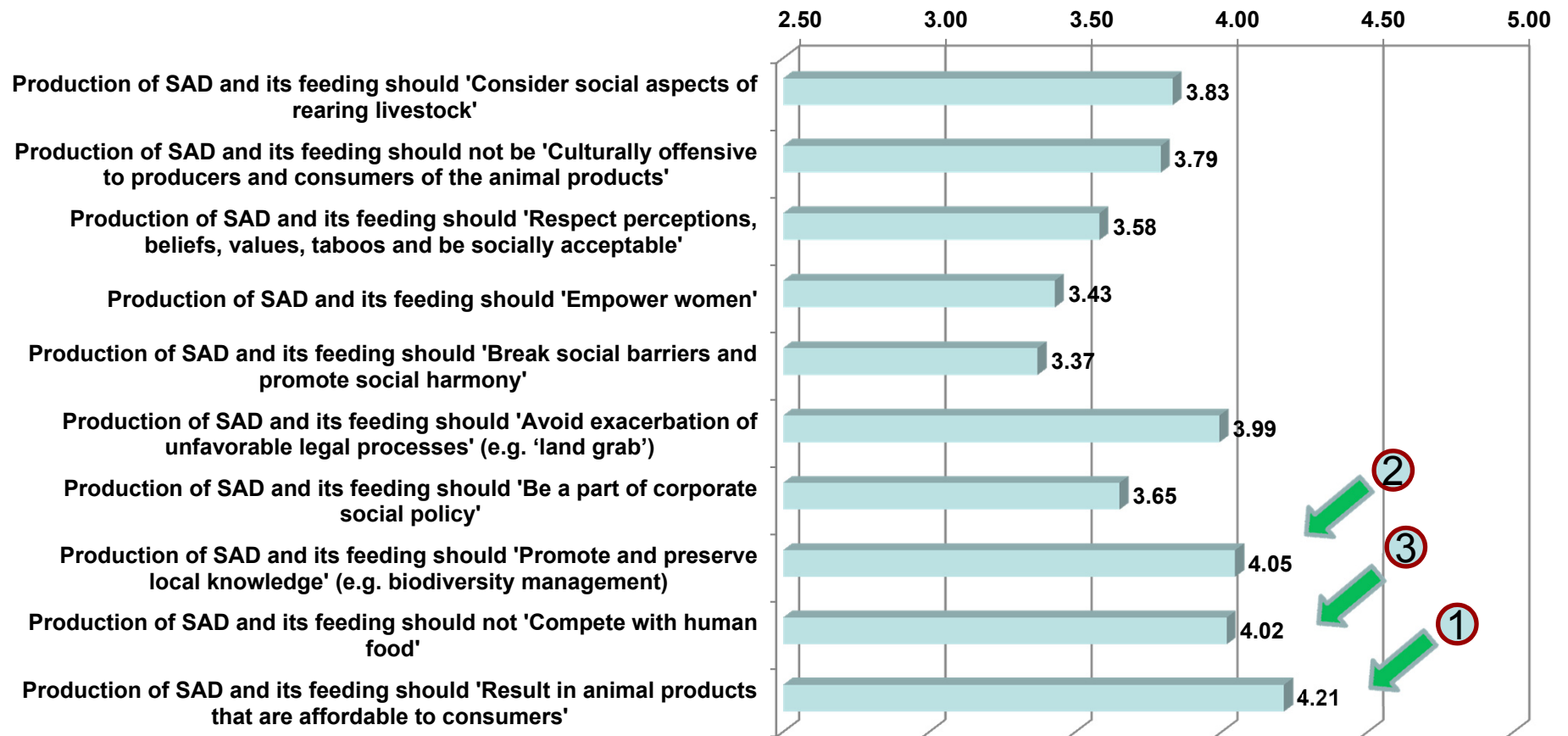
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Relative importance of socio-cultural elements of SAD that provide benefits for people (People dimension of the sustainability)

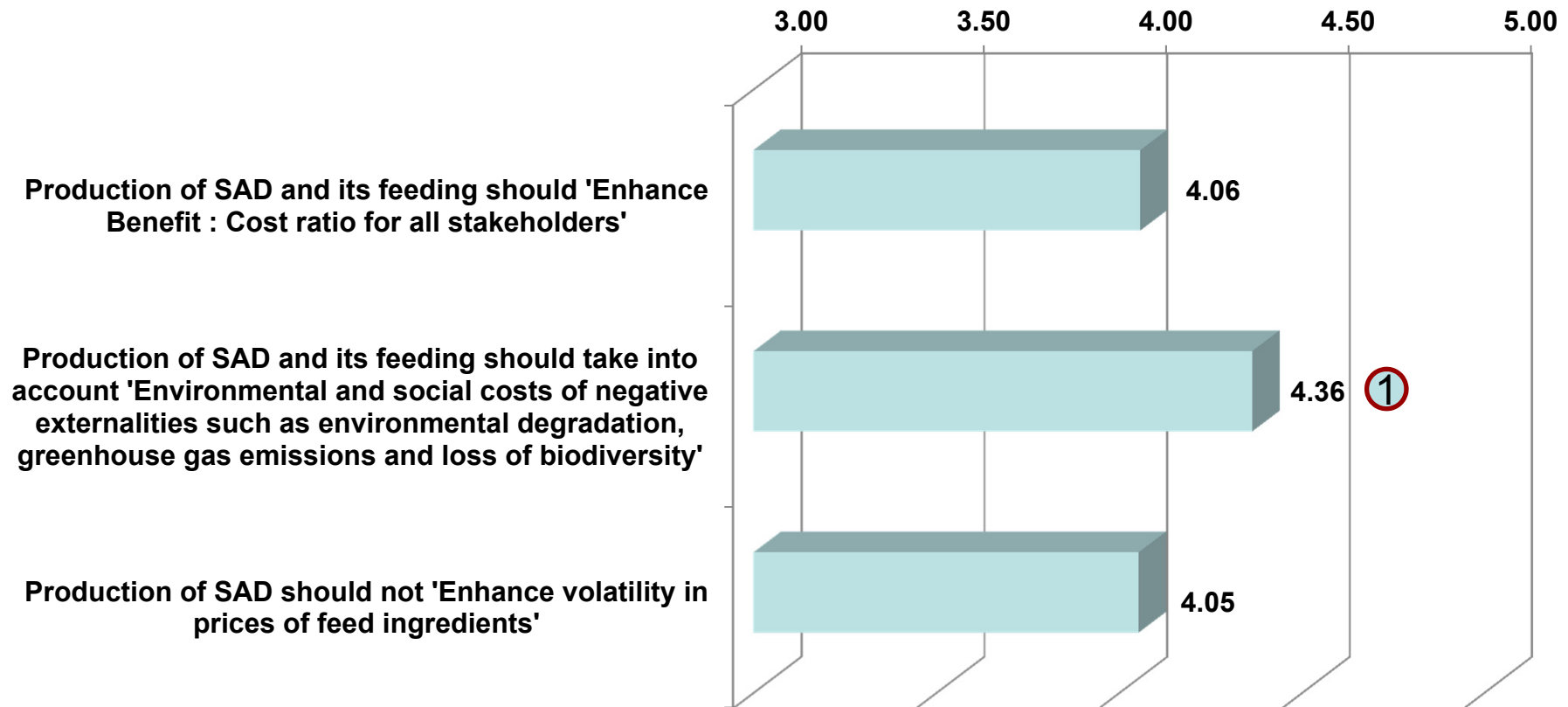
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Relative importance of economic elements of SAD (Profit dimension of the sustainability)

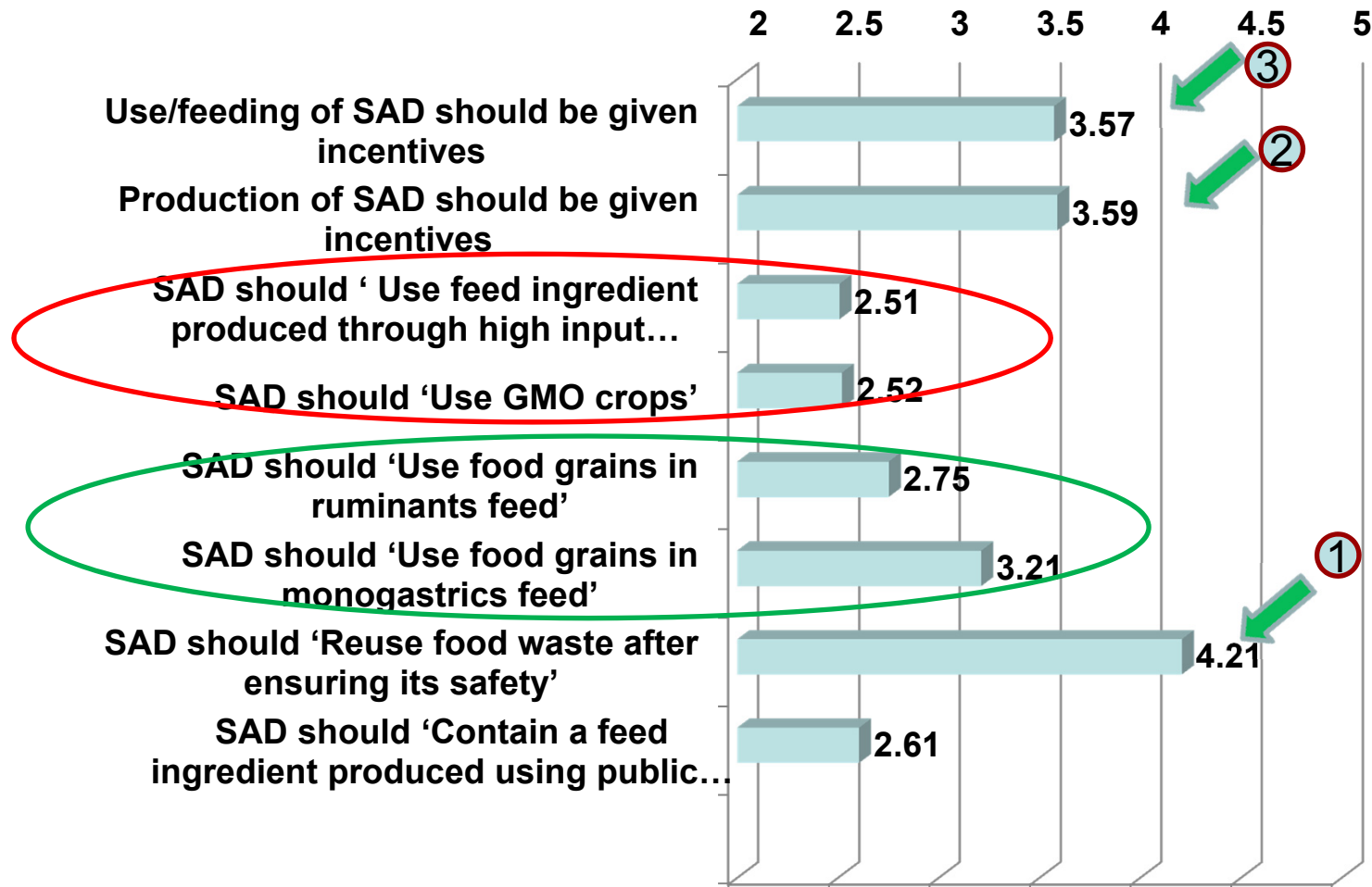
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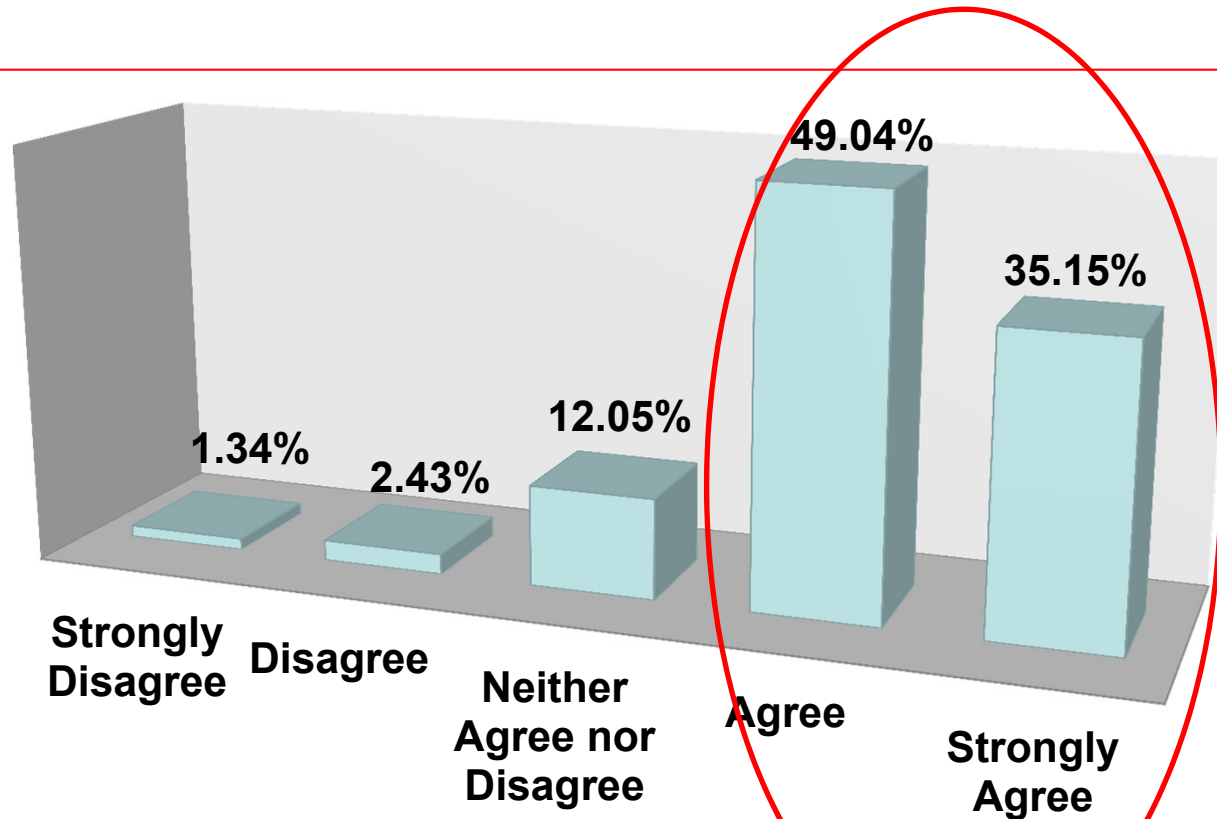
Relative importance of other elements of SAD

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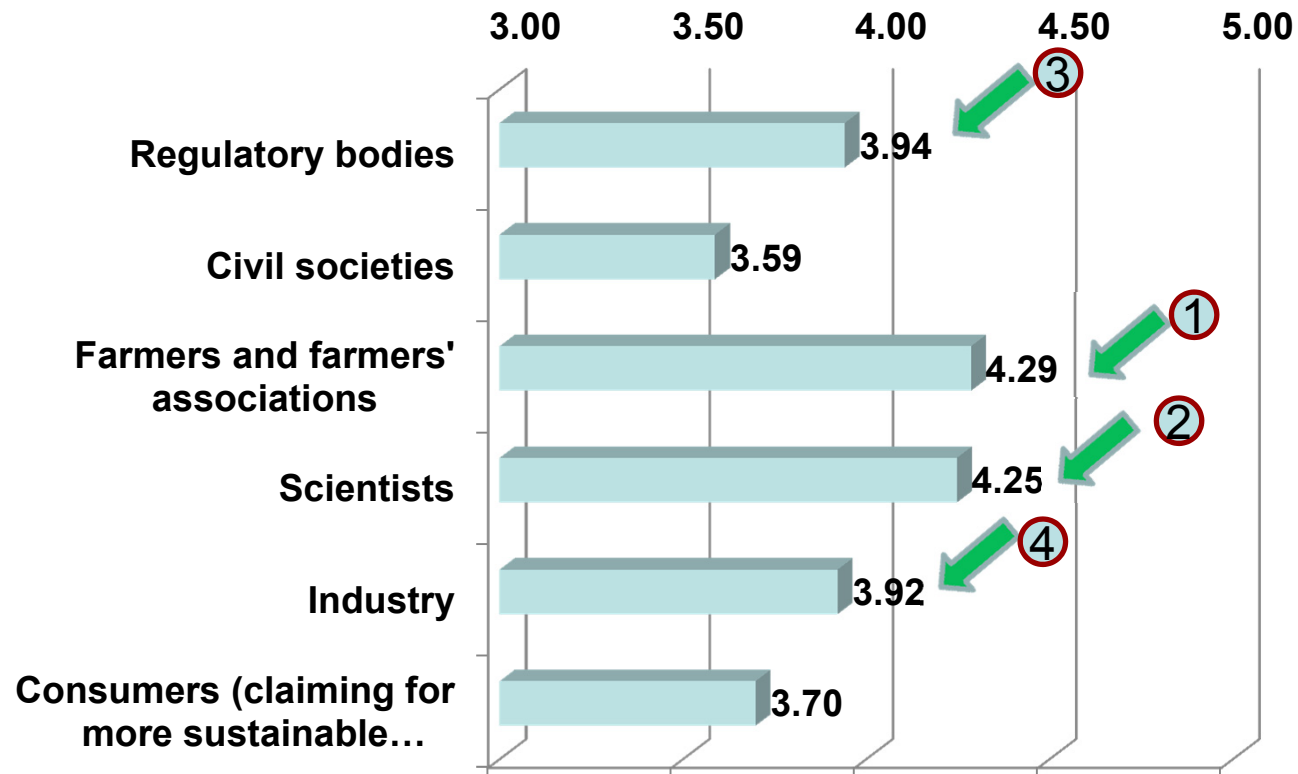
Extent of agreement on integration of the ethical dimension into SAD





Who should take initiative first to restructure feed production and use system to meet requirements for SAD?

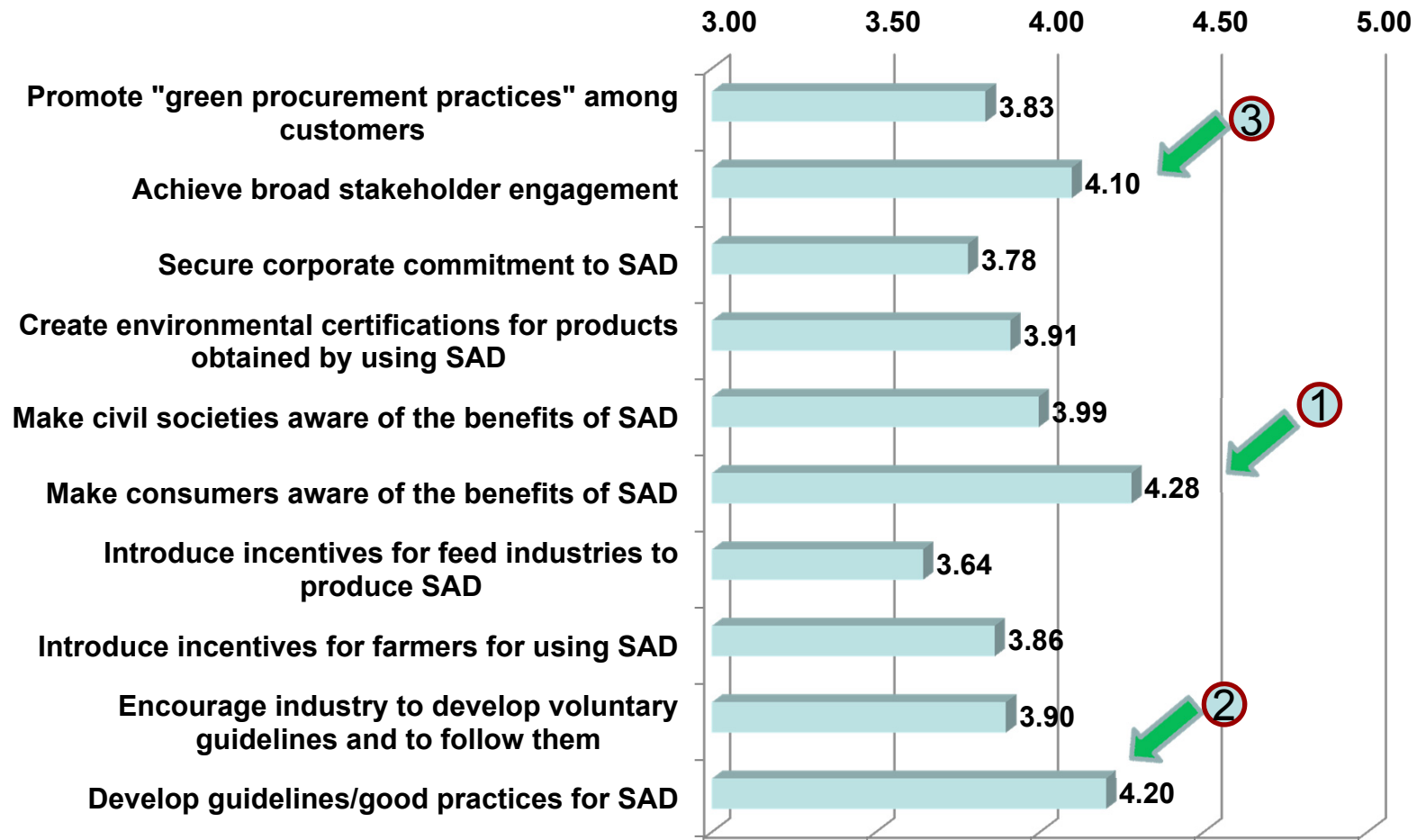
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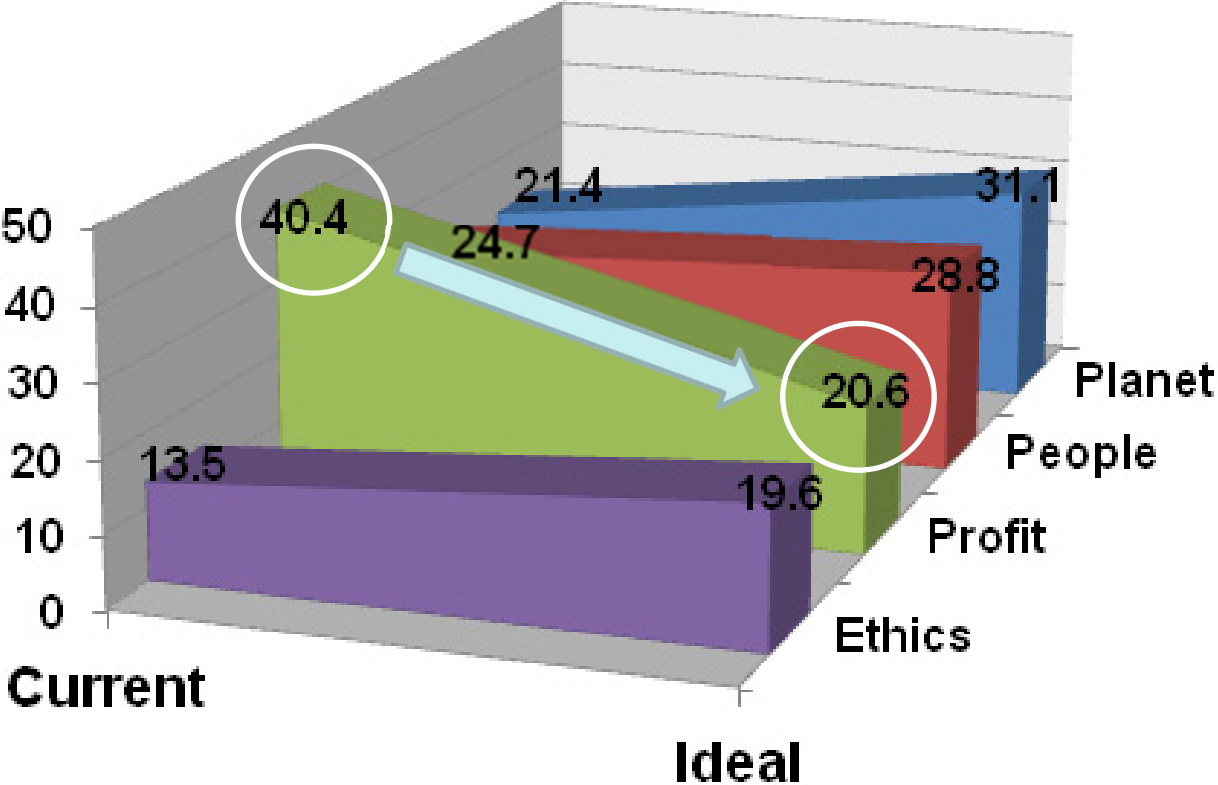
How to operationalise SAD?

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Casting of 100 votes to sustainability dimensions of SAD

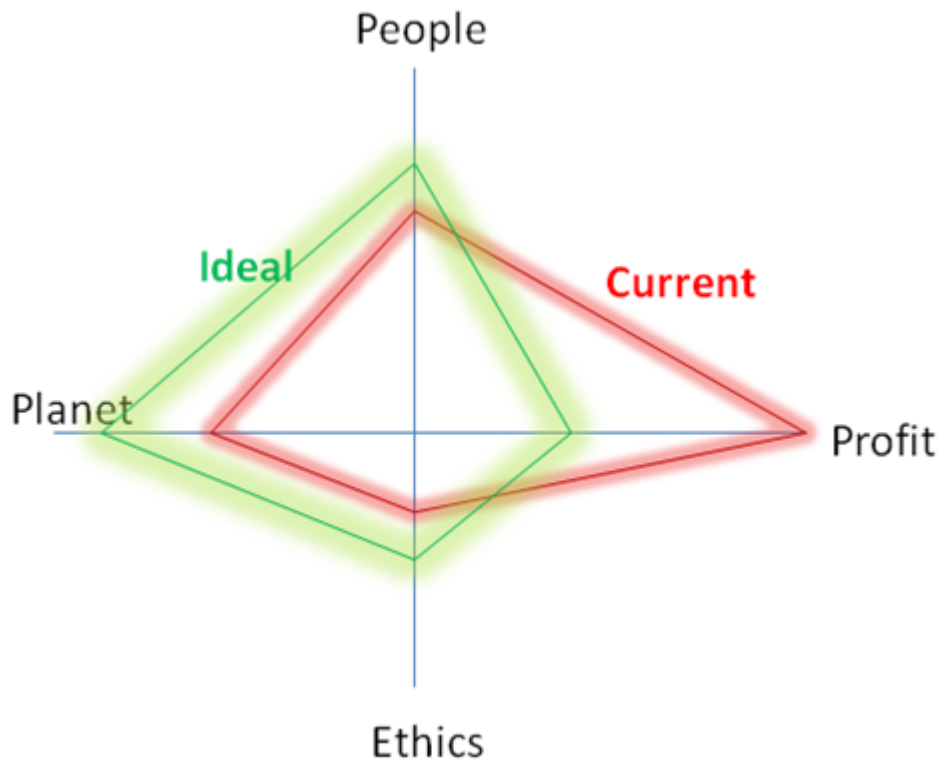




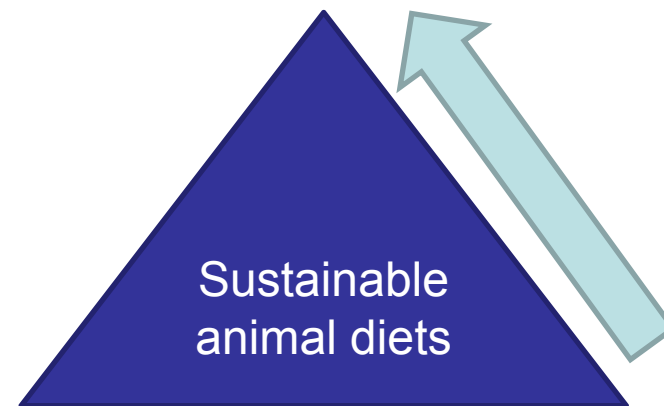
Region-wise analysis
Sector-wise analysis
*(Not presented in the interest
of time)*



Sustainability quadrant – Current and Ideal situations



A journey, following he desired change that all stakeholders agree



Aims at getting better and better with time



Study has helped to:

- a) set direction of positive change
- b) priorities various elements
- c) identify sectors that should take initiative
- d) Identify modes to put the concept in practices



Study laid foundation for developing

- A global framework for multi-criteria evaluation of feed resources
- A basis for monitoring R&D priorities of R&D institutions and donors, and to align them to the needs of producers
- A framework to identify future R&D priorities, driven by sustainability principles.



Thanks for your attention