Data transparency and confidentiality in food supply chain

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Food supply chain: emerging issues

- Changes in trade patterns

- Wider transport possibilities

- Technological developments

- Changes in consumer demand

- More new actors (institutional investors)

- Weak governance frameworks in some areas

- Failure to observe sustainable and responsible business conduct in some areas

Due diligence

- Firms are expected to undertake risk-based due diligence to:
  - observe standards of responsible business conduct along food supply chains, and
  - ensure that their operations can contribute to:
    - economic development and
    - food and nutritional security.

Food losses/waste

- Food security: an important objective of many APEC economies.

- Hence, there is increasing interest in understanding and addressing:

  - the food losses (occurring on the production side), and

  - food waste (occurring on the consumption side) at national and regional levels

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Food losses/waste as a potential risk

- Useful to view food losses/waste in the context of risk-based due diligence:

  - steps all firms along the food supply chain should take to identify and address **actual/potential risks** to prevent or mitigate adverse impacts associated with their activities

- Food losses/waste could be a potential risk

  - Reducing these risks align with sustainable and responsible business conduct

  - Ensuring transparency and information disclosure regrading food losses/waste

Food supply chain: data issues

- Transparency of product and input supply, value and cost

- Rising interest (from consumers, governments):

  - for accessing clear, true, easily understandable information

  - balance between the valid needs of the consumers and the confidentiality needs of the supply chain participants

- Commercial, marketing and public policy implications of supply chain data:

  - Food safety, country/place of origin, environmental and sustainability issues, food labelling, food losses/waste

Types of data/information flow

- Categories of data and information:
  - information provided routinely with the product
  - information by demand
  - exception reporting
  - label-based information
  - non-label based information

Data/information by demand

- Food losses and waste in fishery and livestock:

  - ➤ This information may be delivered by demand (i.e. delivered only if it is asked for)

- Firms may collect such information and keep it in an easily and quickly retrievable form:

  - ➤ but they do not have to transfer this information until it is requested

Achieving high data transparency

- Disclose of timely and accurate information related to **foreseeable risk factors** (food losses/waste) along the supply chain

- **Hold good-faith, effective and meaningful consultations** with firms before initiating data gathering survey:

  - continue to hold consultations with them during and at the end of the survey

Data security concerns

- Privacy concerns drive many firms' resistance to participating in whole of supply chain surveys as a data breach could result in:

  - the release of proprietary information
  - divulgence of business secrets, or
  - the loss of competitive advantage.

- Hence, they may refuse to share anything beyond what the government requires.

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Data confidentiality

- Ensure a balance between the information needs (by others) and the needs for protection of IP and vital business/commercial information of the suppliers providing the data.

  - A potential solution is to replace the names of the suppliers, customers and other chain members by codes, to which all important background information is related.

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Data transparency

- In 'process based' approach *transparency* means a set of measures:

  ➢ for building up credibility for data users, through openness and accountability on activities along the food chain (including food losses/waste)

- This is achieved by making appropriate data/information available and understandable

Data gathering tips

- Clearly explaining the objectives of the survey
- Specifying the benefits to data suppliers and others
- Identifying the downsides and how to overcome them
- Ensuring the confidentially of the data
- Using trusted data collectors with strong credentials
- Winning the trust of the respondents
- Verifying data quality
- Providing feedback to data suppliers on results of the assessment

Implementation issues 1

- Clearly explain the **purpose** of the survey / data collection and the likely **benefits.** This will enable building trust with the respondents

- Ensure that data is used in a way that will not endanger the **competitive position** of respondents

- Inclusive / fully transparent consultations with the respondents could help reduce **non-compliance**

- Highlight the potential **commercial benefits** of reduced food losses/wastes

Implementation issues 2

- **Resolve concerns** of respondents promptly, using an understandable, transparent, culturally appropriate and readily accessible consultative process

- **Data verification** is a critical element because it's the only way to ensure that the information collected is accurate.

  - Data must be verified and validated across its entire journey along the supply chain

Implementation issues 3

- **Data security / confidentiality concerns** are real and dependent on how data are stored and how access is controlled.

  - The concerns generally relate to the potential for divulgence of confidential information including trade secrets and commercial arrangements

  - Some data elements are more sensitive than others. Any sensitive data elements should be treated carefully to reduce the likelihood of them being released.

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Implementation issues 4

- **Data ownership** is a critical issue in the food sector.

  - ➤ As the distribution of data ownership does usually not match the power balance in food supply chains, it is a source of tension and debate. Data could be owned by individual enterprises or by groups of enterprises.

- **Data is connected with costs, their use with benefits**

  - ➤ Data provided by some firms could be used by other members of the supply chain against their interest. This is part of the debate on the provision and use of data between agriculture, industry and retail.

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Implementation issues 5

- **Ensure protection against misuse of data:**

    - Avoid the use of data for purposes not agreed upon in data provision agreements

    - Protect against distribution by recipients to third parties not agreed upon

    - Protect against access to data not authorized by data owners

Areas for further discussion 1

- Could food tracking and tracing (traceability) measures be used to assess food looses and waste?

  ➢ Tracking and tracing (traceability) measures are used in the livestock and seafood industries in many developed economies

  ➢ **Traceability** means the ability to track any food, feed, food-producing animal or substance that will be used for consumption, through all stages of production, processing and distribution.

Areas for further discussion 2

- Traceability system:
  - ➢ creating internal documentation of due diligence processes, findings and resulting decisions
  - ➢ maintaining internal inventory and transaction documentation that can be used retrospectively to identify actors in the supply chain
  - ➢ maintaining the information collected for a period of several years
  - ➢ may be implemented by participating in industry-driven programmes

- Traceability system:

  - should be tailored to the capacities of various suppliers.

  - small-scale farmers might have difficulties meeting stringent and costly traceability requirements.

    - In such cases, firms can help build their capacities in order to improve their performance and comply with responsible business conduct

National Livestock Identification System

- Identification/tracing livestock in Australia;

  - Identify the physical location for the animals

  - An animal identifier (visual/electronic tag/brand)

  - A web accessible database

- Purpose:

  - Disease control

  - Market access

  - Ensure product integrity (track contamination)

Secure data integration

- Legislative framework

- Strong security (physical and electronic)

- Established data management practices

- Audit mechanisms (electronic and manual)

- Disclosure control

- Organisational capability & culture of confidentiality

- Able to provide access to results

Source: ABS (www.abs.gov.au/dataintegration)

Thank You

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