

Pan-Canadian survey on perceptions and concerns of the Agri-Food industry facing the challenges of food fraud



Nathalie de Marcellis-Warin, Ph.D., Ingrid Peignier, Ing., M.Sc.A, Yoann Guntzburger, Ph.D. (CIRANO)

With the collaboration of: Samuel Godefroy, Ph.D., Virginie Barrere, Ph.D., Jérémie Théolier, Ph.D. (Université Laval-INAF) & Catherine Dhont (CRIBIQ)

●●● ABOUT THE PROJECT

PAN CANADIAN SURVEY DEDICATED TO ALL AGRI-FOOD INDUSTRY ACTORS

- **OBJECTIVES** : Food fraud is a growing concern in the agri-food industry. In this regard, it is important to better understand the industry's perceptions and concerns about food fraud but also to document the practices applied to prevent and detect food fraud.
- **SAMPLING** : 398 companies. Representative sample by sector and region, independently.
 - Regions** : Atlantic, Quebec, Ontario, Prairies et British Columbia ;
 - Sectors** : Producers, Manufacturers, Retailers
- **DATA COLLECTION** : online survey from October 2017 to April 2018
- **AVERAGE TIME to complete the survey** : 20 min

What is Food fraud?

Food fraud occurs when food or drink is sold in a way that deliberately misleads or deceives consumers or customers for financial gains

- Mislabelling
- Substitution with cheaper ingredients
- Addition of substances potentially harmful
- Counterfeiting

Consequences:

Food fraud can have important impacts on the economy and public health (people suffering from food allergy for example when allergens could be added and not mentioned on the label or people in need for particular nutrients that could have been removed or changed for cheaper ones) and on the beliefs and ethics of people (religious or animal care beliefs)

« No person shall label, package, treat, process, sell or advertise any food in a manner that is false, misleading or deceptive or is likely to create an erroneous impression regarding its character, value, quantity, composition, merit or safety. »

Food and Drugs Act (L.R.C. 1985-current to October 3, 2018)

1 Knowledge on food fraud

Very good knowledge on what is food fraud

- Homogeneous knowledge regardless of the sector
- Respondents from Atlantic provinces have slightly lower knowledge

Elements of food fraud definitions

- An intentional and deliberate act: **92%**
- False or misleading statements for economic gain: **98%**
- An act aimed at misleading the consumer: **94%**

% of respondents who answered YES

% of respondents who answered YES

95%

Hidden mix of a fluid with another fluid of lower quality

97%

Labeling containing false claims

95%

Hidden replacement of a product or one of its ingredients by a product of lower quality

96%

Addition of a non-approved or illegal ingredient

90%

Hidden information about a product or one of its ingredients

79%

Reproduction or forgery of a brand, of a packaging concept, of a recipe, etc. which belongs to a competitor and without authorization

The acts of food fraud were identified at

90%

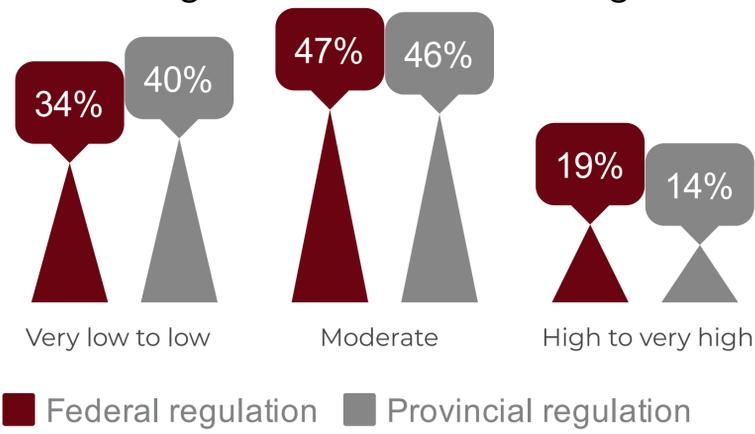
- Except the reproduction without authorization
- No difference, neither between sectors, nor between regions

A communication on food fraud, considered necessary, is still perceived as too insufficient (especially externally)

Project supported with the funds from our partners:



Level of knowledge in food fraud related regulations



Low knowledge in food fraud related regulations

34% people claim to have very low to very low knowledge of federal regulation

On average, for Canada as a whole, **less knowledge in provincial than federal regulations**



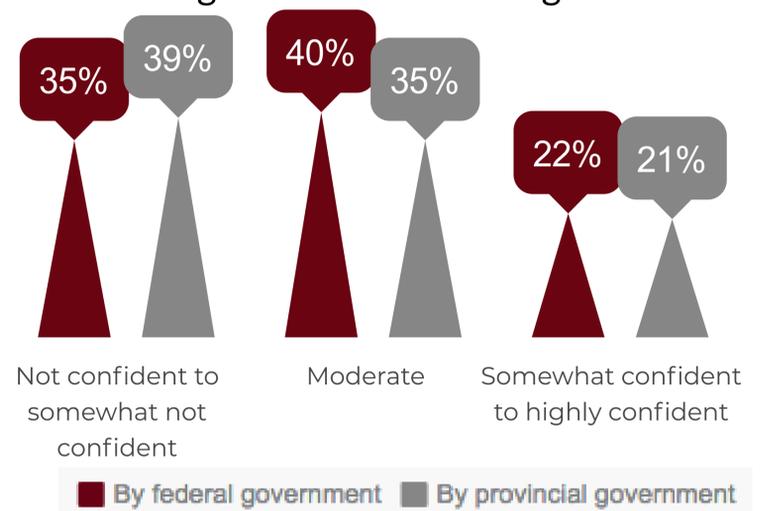
A lower knowledge of the regulations among producers (Fed.: 40% - Prov.: 45%), compared to processors (Fed.: 27% - Prov.: 36%) and distributors (Fed.: 28% - Prov.: 34%)



Confidence in the management of food fraud by the government rather weak

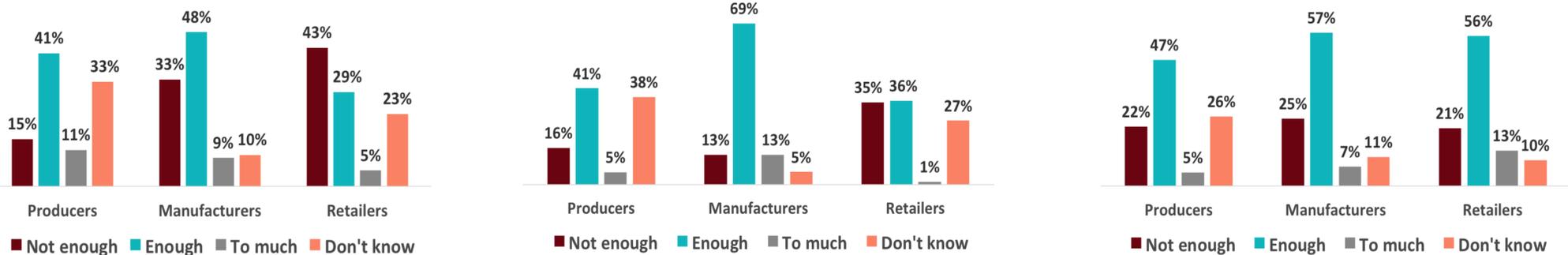
- **Confidence in the management of food fraud by the government is lower among producers (Fed.: 40% - Prov.: 45%),** compared to processors (Fed.: 27% - Prov.: 36%) and distributors (Fed.: 28% - Prov.: 34%)
- On average, for all of Canada, there is **less confidence in the management of fraud by provincial governments than by the federal government**

Level of trust in government to manage food fraud



Actors in the agri-food chain who see themselves as fairly regulated

How do you consider each sector of the agri-food industry to be regulated?



- While most actors perceive themselves as fairly regulated, **few perceive themselves as too regulated**
- Different groups of actors tend to perceive that **other groups are not sufficiently regulated**
- Only distributors have an equivalent perception for all groups

When the direct customer is not the final consumer, only one in two companies considers that they have the responsibility to ensure the authenticity of their products, once they have been transformed or resold through.

Processors are more aware of their responsibilities in food fraud prevention within the chain

"My business has a responsibility to ensure that"



% of people somewhat in agreement or strongly agree

72% — 87% — 71%
The integrity of the practices of its subcontractors

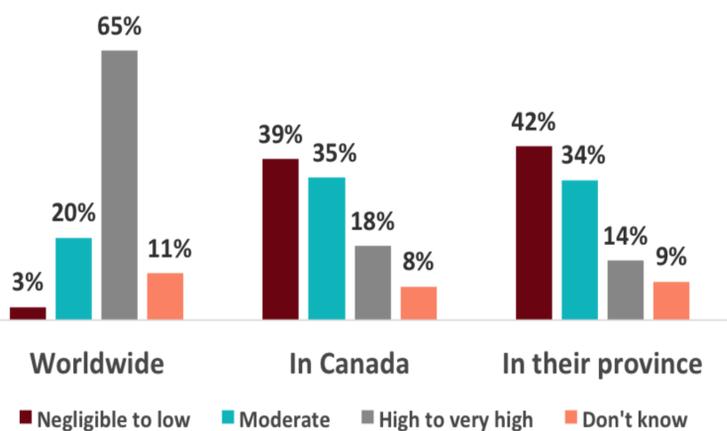
50% — 49% — 45%
The authenticity of its products after they have been transformed by customers

49% — 50% — 40%
The authenticity of its products after they have been resold by customers

Risk = Probability * Consequences

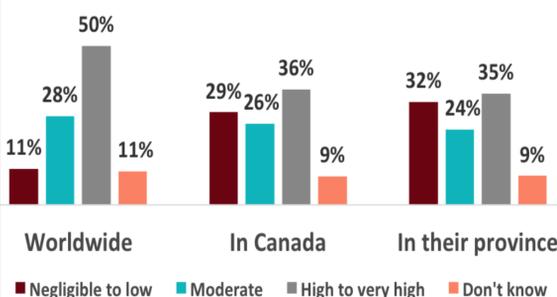
Canada perceived as more secure than the rest of the world

Perceptions of the amount of adulterated products across the entire agri-food chain ...

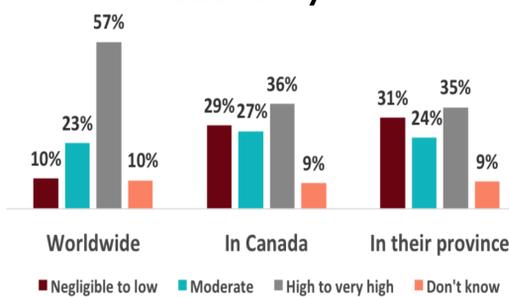


Consequences of food fraud

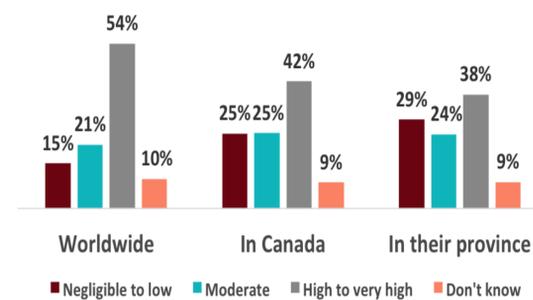
Perceptions of public health consequences ...



Perceptions of the consequences on the economy ...



Perceptions of the consequences on the agri-food industry ...



Although food fraud seems to be more prevalent elsewhere, there is some awareness of its consequences in the agri-food industry in Canada

- In terms of perceived risks, there is no significant difference between the sectors in the agri-food chain

A heterogeneous sense of security in the agri-food chain

Producers who feel more secure from fraud

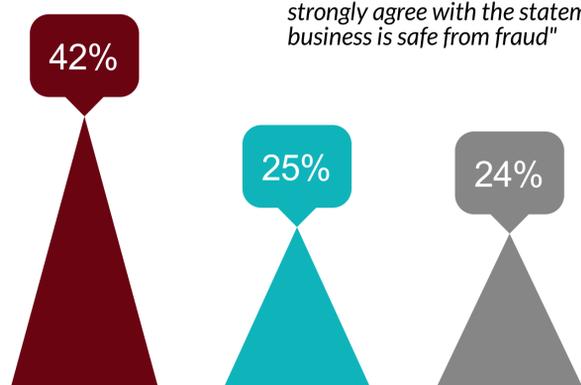
33% Agri-food chain actors in Canada consider their business safe from food fraud

But

We have

42% of Canadian producers

% of respondents, by sector, somewhat or strongly agree with the statement "My business is safe from fraud"



Producers Manufacturers Retailers

- The more people trust government management, the more likely they are to feel safe (.12, p <.05)
- British Columbia feels better at shelter (45%) than Quebec (30%)

Distributors who consider themselves more victims of fraud

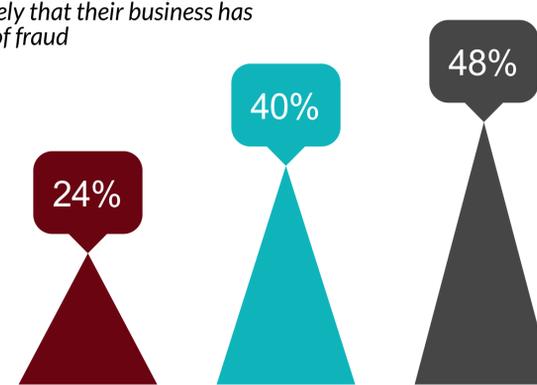
35% Agri-food chain actors in Canada feel it's likely they have already been a victim of fraud in the past

But

We have

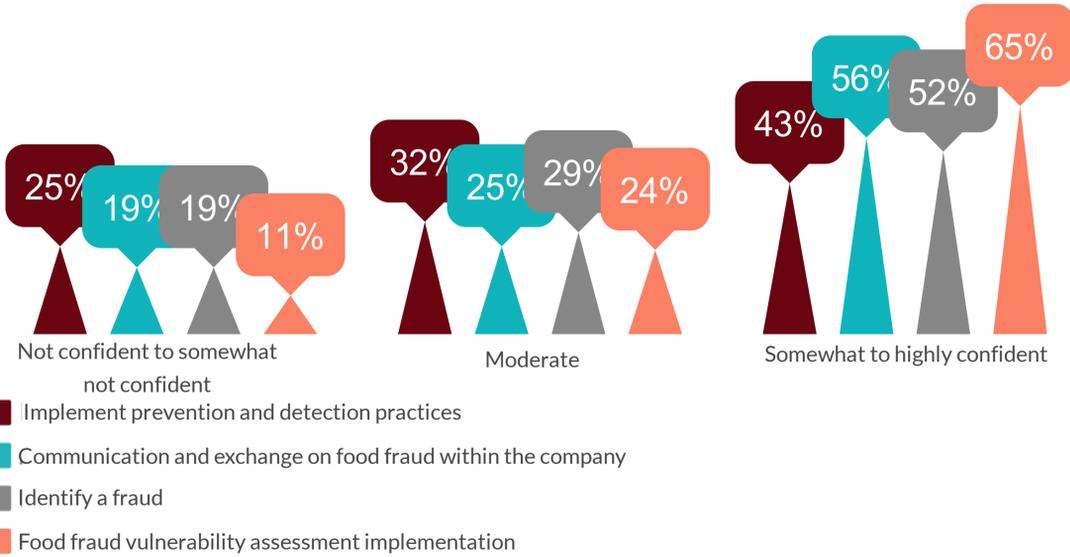
48% of Canadian retailers

% of respondents, by sector, reporting as likely to be quite likely that their business has ever been a victim of fraud



Producers Manufacturers Retailers

- No significant difference between regions

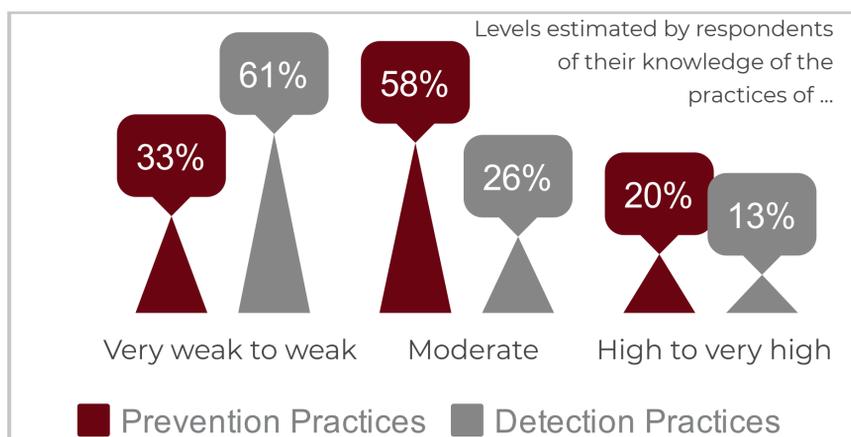


Limited trust in their abilities to deal with fraud

43% respondents only feel they can recognize a fraud or are quite **confident in their ability to recognize a fraud**

No significant differences between sectors

Fraud prevention practices much more known and used than detection practices



68%

Businesses in Canada report having **average to very high levels of awareness in prevention practices** (only **38%** for **detection practices**)...

38%

of Canadian **producers** report having **very weak knowledge** of prevention practices, compared to **24% of processors** and **28% of distributors**

(No significant difference between sectors regarding detection practices)



Prevention practices

Most used prevention practices

- **Supply Chain Traceability Systems:**
 - the **most used** prevention practice internally (72% in general and it is even 94% of transformers)
 - the one deemed the **most effective (4,2/5)**
- 79% of companies rely on **long-standing, trust-based relationships** as a fraud prevention practice against their suppliers

Prevention practices deemed most effective

- Detection technologies are the second best practice, but only 27% of companies have implemented them
- **Vulnerability analysis is the 3rd most effective practice**, but only 36% of companies set it up



Detection practices

Very little use of detection tests ...

- 77% of companies never or rarely test for the presence of food fraud

... But a good confidence in the laboratories that perform the analysis

- 72% of companies rather trust or trust them

Reasons why practices of food fraud prevention are not implemented

1. Lack of human resources
2. Lack of financial means
3. Lack of time
4. Lack of training and knowledge

●●● CASE STUDY

You suspect a risk of fraud involving one of your suppliers. What initiative(s) do you take?

69% of the companies **talk directly to their supplier**

39% report the incident to **federal and provincial authorities**

This result is consistent with the previous answers from respondents. A strong relationship based on trust is the **first measure implemented to prevent food fraud from suppliers (79% of respondents)** followed by **product checking (45%) and audits (39%)**.