Executive Summary: What works to prevent food fraud

Aims

This study was undertaken to guide the FSA and the National Food Crime Unit (NFCU) on the development of future strategies and operational activities to improve food fraud prevention.

Its aims were to:

(1) Investigate successful initiatives and strategies for fraud prevention and especially food fraud prevention; (2) understand what has worked well in preventing commodity-based fraud (including food fraud) and the lessons learned from these initiatives and strategies; (3) provide recommendations which could be adopted by the NFCU and incorporated into the unit's key strategies; and (4) provide recommendations for any future research required within this area.

The key research questions which underpinned these objectives were: (1) What food fraud prevention strategies and initiatives have been implemented in the UK and other countries? (2) What strategies and initiatives have been implemented to prevent and tackle commodity-based fraud in other industries? (3) What conditions need to be in place to enable fraud prevention strategies to be successful?

Approach

1. A review of academic and policy literature where 151 sources were identified and reviewed that considered prevention initiatives focused on food-related crime, food fraud, and food defence
2. Interviews with domestic and international experts, including representatives from organisations which have established fraud prevention strategies. Sixteen interviews were conducted with interviewees from a range of backgrounds including food businesses, law enforcement, Official Controls, food testing service providers, private and public food governance organisations, and academia.

Findings

At a food business operator (FBO) level, reactive detection dominates especially where financial, knowledge, and time resources are limited. The current regulatory approach towards food fraud of using intelligence, policing perspectives, and laboratory authentication is perceived as focusing more on reactive detection rather than prevention strategies. Addressing the transition from food fraud detection to prevention strategies at FBO level should be a priority.

Globally, for decades, the hazard analysis critical control point (HACCP) approach has been used successfully by businesses as a food safety prevention tool. First generation assessment tools have been developed for food fraud, wider food crime, and food defence such as threat analysis critical control point (TACCP) and vulnerability assessment critical control point (VACCP) and SSAFE's food fraud vulnerability assessment tool (food fraud). The FSA's food fraud resilience self-assessment tool also provides an alternative approach for small and medium-sized enterprises (SMEs). Having three HACCP, VACCP, and TACCP assessments with minimal interoperability is cumbersome for FBOs, particularly SMEs. The adoption of hazard analysis critical control point food defence plans (HACCP-DP) combining hazard and threat analysis into a single assessment would be of value at regulatory and business levels. Hurdle effect strategies (a combination of multiple preventative measures (hurdles) that in combination reduce the likelihood of a food safety or food fraud event occurring) offer promise in food fraud prevention. Extending 'hurdle effect' thinking from food safety assurance and food preservation to food fraud prevention is essential. The development of integrated food control management systems (FCMSs) with FBO level, supply chain level, and state level verification are crucial. Verifying the efficacy of FCMSs as an economic, social, and cultural ecosystem is essential to food fraud prevention.

FBOs can minimise fraud risk by operating effective upstream prevention strategies (from the business back through to all tiers of suppliers). Focused supplier approval and procurement processes where embedded in 'business as usual' are an essential 'what works' strategy. Supply chain pressures and practices to deliver low-margin and lower cost food products can promote mindsets and an operating environment where deception, misrepresentation, and fraud occur. 'What works' in supply chain management practice needs to be disseminated more widely.

SMEs need further guidance and appropriate tools to help them identify vulnerability and mitigate food fraud risk within a FCMS. Food fraud vulnerability assessment guidance within existing tools such as Safer Food Better Business Guidance would be of value to SMEs.

Vulnerability assessment is only the first stage of developing a food fraud prevention strategy within a FCMS. Second and third generation tools and fraud prevention approaches are being adopted by industry. Investment by large organisations in bespoke early warning systems using a range of intelligence is informing a more effective preventive response. Excellent intelligence sharing networks exist, but, a step-change is needed in embedding food fraud prevention strategies within the NFCU to aspire to deliver frictionless integration of real-time data sharing. Access to the information created within early warning systems, supported by appropriate data governance structures for intelligence sharing between parties would accelerate the abilities of NFCU to tackle food fraud.
Better organisation of real-time and historic evidence sources to inform food fraud prevention at national level is essential. The NFCU does produce strategic assessments and disseminates information through newsletters. The recent NFCU External Review 2022 has suggested further developments within the NFCU should consider improved communication strategies for disseminating the scale and the specificity of the food fraud threat. Lack of reliable real-time intelligence also makes it difficult for regulators to know where to focus resources to prevent food fraud.

Rural crime prevention is under-resourced. For police officers, food fraud and wider food crime may be encountered seldom in their career and by intention fraudulent activities operate 'in the shadows.' Improved knowledge management practices would better support a preventive strategy and inform and guide police officers when they suspect any illegal activity associated with farming, food, and food supply.

Guardianship strategies and a network of capable guardians would underpin the NFCU adopting and operationalising an effective food fraud prevention strategy. Integrating a guardianship network and intelligence gathering processes would support effective verification of the national FCMS as an economic, social, and cultural ecosystem. An initial phase would map out an agile, integrated guardianship network in the UK food and beverage context, and existing data that could be collated in addition to activities of existing networks.

The social and psychological contexts of food fraud must be better understood from identifying fraudsters, their modes of operation, causation, rationalisation, and motivation to then inform effective food fraud prevention strategies. These strategies need to operate at multiple levels of the food system. Food fraud is often operated in parallel with intentionally illegal business operations that are focused on crime, and often active in multiple illicit activities. Food fraud prevention strategies need to also focus on preventing organised illegal activities activity by perpetrators operating outside of existing networks.

Future FSA research needs to consider how 'what works' can be embedded into accessible guidance for the NFCU and for FBOs. Further research should consider the value of fraud prevention strategies such as forensic accounting and triangulation of intelligence as part of a verification ecosystem, which has been found to be of value in other sectors.