

Extended Abstract

Paper/Poster Title	Understanding consumers' perception of meat safety and quality at pre-harvest and harvest stages in Afghanistan: A qualitative content analysis
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Abstract	200 words max
<p>Food safety is an integral part of food security and nutrition, as it affects health and livelihoods of the poor. However, there is limited understanding on how consumers in developing countries perceive food safety and quality. To this end, this study aimed at: (i) determining the importance of meat and key meat quality attributes; (ii) evaluating consumers' perception of meat quality and safety at pre-harvest (sedentary versus nomadic systems); and (iii) assessing if perceptions vary for meat stemming from different processing systems at harvest stage (traditional butchery and modern slaughterhouses). For this purpose, qualitative data were collected through seven focus group discussions in Kabul and Bamyan, Afghanistan. Based on the findings, Halal-slaughtering is important. Meat of both the sedentary and nomadic ruminants is perceived high in quality and taste, with lower food safety hazards due to feeding on natural pasture. In both systems, diseased-ruminants are traded. In contrast, meat of city-dwelling ruminants is perceived unsafe and lower in quality due to feeding on food-waste. While supermarket meat is perceived better in hygiene and processing, but not fresh, butchery meat is perceived fresh, natural, and healthy, but unhygienic. Results imply further that food fraud is practiced at all stages.</p>	
Keywords	Consumer perception, meat safety, meat quality, small ruminant, sedentary, nomadic, traditional butchery, supermarket, pasture, and place of origin.
JEL Code	Agricultural Policy: Food Policy, Q18
Introduction	100 – 250 words
<p>Food safety is a major global health concern. In developing countries, the topic has attracted much research attention after publication of the report on global burden of foodborne diseases (FBD) by WHO in 2015. Animal-source foods (ASF) such as meat, are a major source of FBD. Moreover, food safety hazards are available at all stages of meat production. At the pre-harvest stage (production) livestock infection to certain pathogens and contamination to microbes, parasites, and drugs are common. At the harvest stage, meat gets contaminated due to hazards during slaughtering and processing. While research on food safety and quality is well established in developed countries, there is a knowledge gap in developing countries. More specifically, it is unknown how consumers perceive meat stemming from different production and processing systems. In Afghanistan, meat is culturally a desired food, but regulatory system is weak or non-existent, there is no food quality act, and informal sector</p>	

dominates meat market. Hence, there is little understanding on the prevailing institutions in the informal sector. Accordingly, this study aimed at determining the role of meat and important meat attributes, analysing consumers' perception of meat quality and safety at pre-harvest stage (sedentary, nomadic, and city-dwelling livestock systems); and assessing consumers' perception for meat processed at different processing systems (traditional abattoirs versus modern slaughterhouses/supermarkets) at harvest stage.

Methodology

100 – 250 words

The study employed a qualitative approach, namely Focus Group Discussion (FGD) which is an established approach in exploring consumers' perception towards a new product or certain product concepts. The focus group approach was chosen due to its ability in extracting rich data about consumers' beliefs, views and opinions about the subject of the study. We conducted seven FGDs in total: four in Kabul and three in Bamyan. A total of 52 participants took part in all the session with an average of 7.4 person per session. Participants were selected based on convenience sampling method and the selection criteria were that: participants must be meat consumers, should have experience of meat purchase, and aged over 18 years. Each session lasted about 90 minutes. The sessions were audio recorded, which were then transcribed into local language (Persian), and subsequently translated into English. For analysing meat quality judgement, we utilized the Total Meat Quality Model, which is a two-dimensional model: time dimension, distinguishing before and after purchase evaluation, and quality dimension, analysing quality based on search, experience and credence attributes. All other sections were analysing based on qualitative content analysis via MAXQDA version 2020. The translated transcripts were first coded using thematic coding mechanism. Coded segments of all the seven transcripts were then summarized, compared, contrasted, and visualized for final analysis.

Results

100 – 250 words

This study consisted of mostly young and educated participants aged between 18 – 45 years. On how consumers form quality expectation, we employed the Total Food Quality Model (TFQM). Before purchase, Halal-qualification and safety are key credence attributes. Cleanliness, place-of-origin, and slaughter-date are important extrinsic, search cues, with freshness, colour, smell, fat-content, being the most important intrinsic, search quality cues. After purchase, consumers form their future purchase motives based on taste, tenderness, and trust in the local butchery.

At the pre-harvest stage, consumers perceive meat of both, nomadic and sedentary ruminants high in quality and taste due to free movement and access to diverse pasture, with food safety hazards being lower in both systems. However, the latter feed on mountain pasture which has positive impact on meat quality. In both systems, selling of diseased-animals is practiced. In contrast, it is perceived that city-dwelling livestock, i.e., ruminants raised in urban areas, is exposed to higher food safety hazards due to feeding on food waste, and hence meat quality and taste is low.

At the harvest stage, perceptions are mixed. While supermarket meat is better perceived in hygiene, processing and packaging, it is perceived not fresh and not preserved/refrigerated well in Afghanistan. Therefore, consumer trust in supermarket/packaged meat is low. In contrast, traditional butchery meat is considered as fresh, natural, tasty, and healthy, hence consumer trust in butchery meat is high. But consumers also associate negative perceptions to traditional butcheries: higher food safety hazards, poor hygiene, and lower level of animal welfare.

Discussion and Conclusion**100 – 250 words**

Although due to the nature of FGDs, findings of this study might not be generalized, requiring in-depth, quantitative exploration, we can imply that place of origin, safety, freshness, colour, and taste are important meat attributes for Afghan consumers. Meanwhile, participants placed special importance on Halal qualification and Halal label for imported meat, which is not surprising given that the bulk of the population is strictly religious.

Results also imply that food fraud is practiced at both pre-harvest, and harvest stages.

Livestock holders occasionally sell diseased-animals to local butcheries in order to avoid losses. Food fraud seems to be a common practice in developing countries where public institutions such as food safety control system are absent. Such institutions are inefficient and non-existent in many places in Afghanistan, resulting in higher food safety hazards along the supply chain. By placing a higher degree of trust in traditional butcheries, albeit acknowledging higher food safety hazards in the system, consumers seem to show optimistic bias, believing that they are less likely to face negative consequences. Consumers often demonstrate optimistic bias for self-prepared food, and foods with shorter supply chain, and when they don't trust formal institutions. Lower level consumer trust in supermarket meat can be due to the fact that supermarkets are incapable of keeping their cooling facilities powered on all the time because of non-reliable power supply. Hence, adoption of good animal husbandry practices (GAHP), implementation of hazard analysis critical control point (HACCP) system, and enforcement of food safety regulatory may improve meat safety.