

Agro-industry sector case studies: Summary report of the ABDC-10 parallel session¹

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The session on case studies in the food processing sector was attended by some 25 delegates. Three presentations related to traditional fermented products from developing countries, were made:

1. Pozol, a traditional fermented maize-based beverage of Mexico (Carmen Wacher).
2. Soy sauce production in Thailand (Rosa Rolle).
3. Mabi, a traditional beverage, the fermentation product from an indigenous plant in the Dominican Republic (Bernarda Castilla).

While Pozol production has yet to be commercialized in Mexico, starter culture development wherein a new strain of yeast isolated from the traditional beverage Mabi has been patented and licensed with the branded product, Bejuking, seen as a local success story in the Dominican Republic. In contrast, soy sauce is internationally known and there is increasing market demand for this product. Market demand for quality product has led to technological innovation through the development of starter cultures and bioreactor technology resulting in improved consistency, quality and safety of the product as well as in improved efficiency of the fermentation process. The drivers of innovation in this case were (i) market demand, and (ii) support provided by international organizations, the Thai government and the Thai Soy Sauce Consortium.

The case studies highlighted the potential of biotechnologies for the improvement of traditional products produced in developing countries. It was recognized that without local and/or international market demand for fermented foods that are safe and of good quality, relatively little use would be made of the tools of biotechnology to upgrade fermentation processes. Another option would be to explore new market trends and create demand for fermented foods e.g. through promoting the pharmaceutical, probiotic properties, etc., of fermented products. Discussion emphasized the importance of allocating resources for research to improve traditional products with appropriate co-operation ensuring benefit sharing with indigenous people. Ideas for product improvement were identified as coming from researchers, processors experiencing problems, dissatisfied consumers and by way of meeting export market requirements. Cost-benefit analysis should supplement any research proposals.

¹ This is the summary report of the roundtable organized by FAO on agro-industry case studies on the first day of the FAO international technical conference on Agricultural Biotechnologies in Developing Countries (ABDC-10) that took place in Guadalajara, Mexico on 1-4 March 2010 (<http://www.fao.org/biotech/abdc/parallel/en/>).