Joint FAO/WHO Expert Meeting on the Application of Nanotechnologies in the Food and Agriculture Sectors: Potential Food Safety Implications, 1-5 June 2009

Research and development on nanoscale-science has been growing worldwide. Investment of both public and private sector is expanding rapidly in applications of nanotechnologies to various areas. Government authorities in several countries have established funding and coordinating mechanisms to support their national nanotechnology research programmes. There are still relatively few applications of nanotechnologies that have been commercialized but the potential is well recognized.

In areas of agriculture and food production, a number of applications of nanotechnologies are emerging with the capacity to impact both the food industry and consumers (e.g. food processing and packaging, production of agrochemicals and seed).

Like other new or modern technologies, nanotechnology has the potential to bring significant benefits, but may also introduce potential risks for human health and the environment. Nano-materials may cause health risks which are different from those of similar materials in micro or macro form. There is a need for research to obtain more data on dietary exposure to such materials as well as on their toxicological and physiological effects.

Given the increased global interest in the use of nanotechnology and concerns on the potential food safety implications, FAO and WHO convened a joint Expert Meeting which aimed to identify knowledge gaps including issues on food safety, review current risk assessment procedures, consequently support further food safety research and develop global guidance on adequate and accurate methodologies to assess potential food safety risks that may arise from nanoparticles.