Executive summary

Major changes in demand for agricultural and food products are being fueled by growing populations, rising incomes, and changing lifestyles. These alter where and how food products are grown, processed and distributed; furthermore, new social and environmental concerns are bringing pressure for more change. Demand, not supply, drives product offerings with technology tailoring products to meet consumer needs and sophisticated business models delivering them to the customer in a secure manner.

In the food industry, just as any other industry, product and process development is considered a vital part – indeed the lifeblood – of smart business strategy. Failure to develop new and improved products relegates firms to competing solely on price which favours the players with access to the lowest cost inputs (land, labour etc).

The purpose of this paper is to provide a background context to discussions that will define further work in the area of agrifood system innovation. The paper defines Product Development as systematic, commercially oriented research to develop products and processes satisfying a known or suspected consumer need. There are four basic stages in every product development process. These are: product strategy development; product design and development; product commercialization; and, product launch and post-launch.

There are several systems for classifying food products on their newness. They define the innovation spectrum using terms such as “new to the world”, “product improvements” and “cost reductions”. Innovations can also be described as leading to incremental, major and radical changes. Product platforms can be used to group similar products.

The ultimate test of product development occurs in the market and a new product can only be considered successful if it is a market and financial success.

In terms of product development, this paper has described the food industry as being one in which there are a large number of new products offered to retailers each year and inclusion of a new product almost always leads to discontinuation of another product. However, only a very small proportion of new products were radical changes, the majority were incremental changes. Even then, of the order of 75% of new products were considered to be failures. It was noted that in comparison to other industries (e.g. electronics, bio-technology) there is a very low level of R&D undertaken.

When the economic impact of the food industry was examined, it was determined that, in the USA, the food manufacturing sector is influential on the domestic economy, but was not providing the improvements in efficiency and productivity of other sectors, including the agricultural sector. In the case of Greece, data from 1980 when the economy was heavily reliant on agriculture, showed that expansion of the food sector greatly expanded all sectors of the economy. The analysis also showed that there was a much greater influence on the non-food sector from stimulating the processed food sector, rather than the raw material (agricultural) sector.

Exports of processed foods as a proportion of total agricultural exports grew markedly in a wide range of countries up to the mid 1990’s. But it was noted that there was a stronger correlation between growth in manufacturing exports and processed food exports, than there was between processed food exports and primary products exports.

It is clear that the food industry is an important economic actor in every country and that product development is a key feature of companies’ strategies to remain competitive and to grow. However, it is equally clear that the product development process is dominated by incremental change (the me-too product syndrome) and a very high failure rate for new products.

It was noted that countries are seeking to capture value-added locally and implement trade regulations that encourage imports of relatively less-processed agricultural commodities. While this has undoubtedly contributed to slower growth in trade of processed food products, trade flows are also shaped to a growing extent by the changing

dimensions of the global food industry. More integrated supply chains that locally customize products to meet regional consumer preferences may encourage trade of less-processed agricultural commodities over trade in processed food products. Therefore, even as the food industry becomes more global with the same multinational retailers and manufacturers operating across the world, food demand is being increasingly satisfied at the local level where food suppliers are better able to meet specific demands of local consumers.

The paper concludes by raising three questions in relation to innovation in the food industry and specifically in the area of food product development: first, what actions can individual companies, or the private sector as a whole, take to improve food product development? Second, what can the public sector within countries do to create an environment that might engender more successful product development and can it obtain better leverage from existing investments in food sector R&D? Third, what can multilateral organizations do to assist individual countries or geographical regions to add value to agricultural products through food product development?