INSTITUTE OF FOOD TECHNOLOGY (FINS) IS ONE OF THE LEADING RESEARCH INSTITUTES IN THE FIELD OF FOOD AND FEED SCIENCE AND TECHNOLOGY AND DISSEMINATION OF KNOWLEDGE IN SERBIA AND SOUTH EASTERN EUROPE. OUR RESEARCH AND THE BUSINESS STRATEGY ARE CONSISTENT WITH NATIONAL AND EUROPEAN STRATEGY OF RESEARCH AND DEVELOPMENT, PRIORITIES IN AGRICULTURE AND FOOD AREAS. THE MAIN GUIDELINES OF THIS STRATEGY INCLUDE THE ADVANCEMENT OF KNOWLEDGE IN SUSTAINABLE FOOD PRODUCTION MANAGEMENT, PRODUCTION AND EXPLOITATION OF BIOLOGICAL RESOURCES AND THE DEVELOPMENT OF NEW TECHNOLOGIES AND PRODUCTS IN THE FOOD CHAIN.

Background
- Over 250 successfully completed national and international scientific projects
- Over 750 projects of food industry plants
- Over 1000 expert reports, studies, elaborates, analysis....
- Over 10,000 samples of food and feed products tested each year

1st Global Conference of the 10YFP Sustainable Food Systems Programme, Pretoria 21-23 June 2017
INTRODUCTION

- National Project entitled “New product from cereals and pseudocereals in organic production“, supported by the Ministry of Education and Science, Republic of Serbia.

- Interdisciplinary approach: interlink sustainable, organic agriculture and food processing, including food safety of new functional products, clinical approvement of functionality and market development of sustainable organic products.

- The basic aim of the project is to create an assortment of new bakery and confectionery products based on cereals (spelt) and pseudocereals (amaranth, buckwheat), the grains which are agrotechnically and economically convenient for cultivation in organic farming.

- Research towards:
  - Biodiversity of alternative cereals, phytopathology, quality and health safety issues.
  - Process optimization and modelling, selection of adequate natural supplements and improvers.
  - Tolerable in processing of organic materials aimed at enhancing the nutritional, sensory and functional properties of expanded/extruded products.
  - Development of marketing strategy addressing sustainable national organic market.
**Relevance and added value**

- Increase biodiversity as a baseline for improvement of nutrition and sustainable diets

- Affirmation of alternative cultures with a potential to contribute to more variant supply chain of agricultural products on the national, regional and international market supporting environmental protection and sustainable development of rural bio economy.
  - *Triticum aestivum* ssp. *spelt*
  - *Amaranthus* sp.
  - *Fagopyrum* sp.

- Development of *Functional product* with addition of natural ingredients:
  - Inulin (Stachys affinis, Crosne)
  - Betain (Sugar beet)
  - Elagic acid (Rosbery seed, food waste)

- Food waste valorisation is driver for bio economy as a base for sustainable food system

- Assortment of novel bakery and snack food products based on cereals and pseudocereals grown in organic farming systems is developed and integrated into the Serbian market with extra profit
**Replicability and scalability:**

- Success story can be multiplicated through network of national, regional and international partners.

- FINS is one of the leading institutions in SEE for applicable research in the field of food and feed science and transfer of knowledge to businesses and industry. Our research and the business strategy are consistent with national and European strategy of research and development priorities in agriculture and food areas.

- The project is funded by national funds (Ministry of Education, Science and Technological Development of the Republic of Serbia).

- Possibility to scale up on regional (Danube region) and international level (Cora Organic Initiative, HORIZONT 2020).
African context:

- This project concept is applicable to specific conditions of African resources.
- Underused natural and genetic diversity of plant resources with great potential for development of new sustainable functional food products with added value.
- Example of renaissance recovery of *Amaranthus cruentus* in America (essential aminoacid content compatible with corn for optimal human protein diet).
- High importance of food quality and safety control related to alternative crops in African climatic conditions.
- Serbia had problems with extremely high contamination of aflatoxins in milk (2012) due to unfavorable agroclimatic changes.
- FINS introduced molecular identification technologies for mycobiota in food control in order to face future challenges.
Joining the dots and new opportunities:

- Frame for stepping up scientific excellence of FINS throughout the cooperation with the partners across different disciplines of food technology that are integrally applied in the sustainably use of alternative crops to innovative food products and hence tackle sustainable economic and social development.

- We have the potential to transfer high quality knowledge to industry within Serbia, Western Balkans, SEE and world wide countries.

- Dissemination activities interactively provide and create the new knowledge and interklink stakeholders within SFSP which ultimately will stimulate joint innovation projects and guarantee a successful and synergic cooperation in the future.