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Poster Communication Abstract – 1.11

ERA HDHL KH FNS SYSTEMIC: AN INTEGRATED APPROACH TO THE CHALLENGE OF SUSTAINABLE FOOD SYSTEMS: ADAPTIVE AND MITIGATORY STRATEGIES TO ADDRESS CLIMATE CHANGE AND MALNUTRITION. EOI N. 967 CLIMAQUALITEC AGRICULTURAL BIOTECHNOLOGY FOR NUTRITION QUALITY O

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Securing sufficient and healthy food for all, while minimizing environmental impact is the great challenge we face today. With climate change increasingly affecting food production in disadvantaged areas, the challenges of unprecedented population (especially in urban and coastal areas), and income growth and deterioration of usable land, will intensify. A holistic approach is required to transform the global food production system to adapt to regional necessities. The knowledge on policies and technologies that would enhance productivity and sustainability of individual agricultural sectors is still poor; literature is scarce of information and experiences for countries considering an integrated approach (cross-sectoral policies, strategies, and technologies) for food and nutrition security. SYSTEMIC (An integrated approach to the challenge of sustainable food systems: adaptive and mitigatory strategies to address climate change and malnutrition) is an EU Knowledge Hub on Food and Nutrition Security project was launched by the joint action of JPIs HDHL, FACCE and OCEANS with the aim to fill this gap, fostering transnational and interdisciplinary collaboration and networking, to catalyse and accelerate

research integrating the different facets of the food system to address climate and global change challenges. SYSTEMIC rationale is based on 173 researchers from 41 research groups working in eight countries through a series of workshops on cross-cutting themes, building on and connecting existing initiatives, projects and programs. The objectives will be exemplified using specific cases including cereals, legumes, and olive oil for terrestrial, fish, molluscs and algae for aquatic systems, but the generated data management processes could be applied to other systems in the future. More detailed information is available on project website: http://systemic-hub.eu/. The EoI N. 967 CLIMAQUALITEC, part of the SYSTEMIC network, is a multidisciplinary partnership of 3 different CREA's Research Centres and of the Laboratory of Nutrigenomics from the Department of Bioscience of the University of Milan (UNIMI-Biosciences). This research groups have specific complementary areas of expertise, know-how and facilities that synergistically cooperate to underpin the characterization of staple crops like potato and cereals and derived transformed products for nutritional quality traits. Taking advantage of germplasm resources and biodiversity, the EoI 967 aims to investigate (i) the impact of climatic change and transformation process on the nutritional content of biofortified crops; (ii) innovative packaging solutions that might be adopted to enhance post-harvest storage of raw form and transformed products; (iii) how food consumer's choices might be influenced by food products' beneficial properties; (iv) the antioxidant and anti-inflammatory activity of potato-derived extracts.