

Rice and Innovation in Italy: from genetic research to the market
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Italy is the most important rice growing country in Europe with 220.000 ha, about half of the total in the European Union. The second country is Spain with about half rice surface.

The rice farm size is about 40 ha, much larger than the average national farm size (about 7 ha) and regards very specialized ones. Rice surface increased along the years as well as average farm size, thanks to introduction of new varieties, new technologies and to the effects of policy on the market. Despite its very important rice tradition (for ex. "risotto" dish), Italy is now growing 2/3 of the surface with varieties for export and only 1/3 with rice for domestic market. High attention is paid to international market and genetic research put many efforts on it. The main characters introduced in Italy in the last years were semi-dwarfism (which guarantees height reduction and lodging resistance), long B grain (long and thin grain typically consumed by people in North Europe), aromatic trait (typical of imported basmati and jasmine type) and black and red pericarp. Genetic research is conducted both by public and private sector but in the last years many results were obtained just by the private seed companies. The main grown varieties are Gladio, Balilla and Loto (private) and Selenio (public), grown on 47,5% of the Italian rice area in 2004. The total number of registered varieties in 2003 was 139: only half are grown in field and only 15 occupy 90% of the surface. Some are very old and traditional varieties as Balilla, constituted in 1924. The main rice for "risotto" are Carnaroli, Arborio, Volano, Baldo, Roma, S. Andrea and Vialone Nano which usually have lower average yield, but higher price.

New technologies regards informatics, computers, electronic devices, satellites GPS introduced widely in the farms, on tractors, harvest combines and equipments. Field levelling is conducted thanks to a laser system, chemicals spraying, fertilization and harvesting thanks to GPS facilities connected to satellites, mechanic movement on tractors and equipment are widely controlled by electronic and automatic devices.

Rice market is continuously controlled by some national agencies such as Ministry of Agriculture, Growers Associations, Industry Associations and mainly by Ente Nazionale Risi resulting in having updated statistics on rice area, marketing and requests, good relation with policy maker at national and European level. For ex., the Italian and European policy helped in past (1988 to 1993) in introducing long B varieties for export which were not know up to that period, and helps together with WTO to make worldwide rice market accessible. Nevertheless it takes care of farmers and environment needs thanks to a policy of fund to maintain people in the country and to protect the good water management, to reduce overflow risk and water scarcity. Some national Irrigation Associations such as East-Sesia and West-Sesia Irrigation Associations have key role in getting water from rivers and lakes, in having it available to farmers and industries and to manage water level in the main basins for irrigation and civil use.