The rush for agricultural land and water resources. The role of Europe and challenges for water, food and energy security

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Global resources are likely to become, over the 21st century, the focus of an intensified competition among different uses, the key drivers being the rapidly increasing demand for water, energy, food and minerals related to population growth and urbanisation, and changing lifestyles and diets. Rising population and incomes are expected to call for 50% more food in 2030 and 70% in 2050. In developing countries, the increase will reach up to 100% by 2050, relative to 2009 levels. Over the same period, energy demand from hydropower and other sources will increase by 60%. The need to ensure the sustainability of food and energy provision for a rising population is one of the main themes addressed by Expò 2015. It is clear that the areas of energy, food and water/land policy have numerous interwoven concerns (the *nexus*), which are bringing new political and economic challenges globally. These challenges range from ensuring access to services, to managing resources sustainably to price volatility. Each sphere affects the other in substantive ways, calling for *integrated thinking* in order to find synergies and avoid potential tensions.

All resources availability has a huge dependence on *land*. This dependence is very high for agriculture and water, and also very significant for energy and minerals. Land adds a layer of complexity in the nexus relating water, energy and food, which are the key pillars of global security and prosperity. In this context, it seems to be necessary to increase understanding of the converging global dynamics have spurred a global rush for agricultural land in Africa, Latin America and parts of Southeast Asia, and that has intensified after the food price crises in 2007-2008. Europe emerges as one of the key players in global land acquisitions, both as an investor and as an investee. The increasing pace and dynamics of land acquisitions and the implicit appropriation of water resources poses major challenges to water, food and energy security. In this context, the proposed contribution aims to explore the main drivers and implications of land transactions, especially in resource-abundant development countries.

More specifically, the present contribution will seek to increase understanding on the role that the EU member States play, both collectively and individually, by providing an overview of the scope and nature of land acquisitions pursued by the EU member states and analysing the competition and trade-offs between food and energy-related uses of the acquired land. The impacts on water resources (both *blue* and *green*) will be assessed. It will be shown that the availability of water resources is a fundamental driver of land acquisitions. Finally, the study will seek to analyse the main drivers of such investments, mainly in relation to the EU food and energy policies, and to provide policy-relevant recommendations and insights.

Key words: Natural Resource Security for People: Water, Food and Energy nexus; Large-scale land and water acquisitions