

Euro-Mediterranean Network on Research and Innovation for Food Security

Priority 3: Socio-Economic Dynamics and Global Markets

White Paper Abstract

This work is concerned with the issue of food security, placing special emphasis on the current situation of South Mediterranean countries.

The events of 2007/2008 and those of 2010/2011, has been unfortunately more than an alarm-bell. The most recent spike in food prices alone has shifted almost 45 million people below the poverty line, synonymous with leading an existence on less than 1.25 USD a day, which is already experienced by more than 1.2 billion people around the world. The tensions between supply and demand suggest this is a structural imbalance that will grow in the years to come. The failure to meet the first of the millennium development goals, a reduction in hunger in the world, ought to restore a sense of urgency and determination in order to conceive and design renewed policies at the international level, to build a new overview of global food security. Given the scale of the problem, this need cannot be relegated solely to its traditional place on the agenda on just how to support agricultural development and food self-sufficiency in late-developing areas, but should be tackled with decisions that necessarily involve agriculture world-wide. It is a problem that affects us all and not just a question of how to help "others".

After decades in the wilderness it is no coincidence that the issue of food security is once again part of the lexicon of American and European policy makers, just at the moment when the USA and EU are preparing to reform their own agricultural policies, the longest established and also the most criticized.

By a brief introduction of the main conceptual aspects of food security, this work point out the shift from a former focus on food energy availability to a more comprehensive appraisal of this phenomenon in recent times. The most likely causes of recent rises in food prices are also described. Food security issues are analyzed in connection with rural poverty issues and with the failure to achieve successful agricultural development in some developing countries, which sometimes have to overcome strong restrictions concerning the availability of land and water resources for food production. The paper points to the convenience of using multivariate statistical tools to summarize a wealth of food security-related indicators, and a practical example of the use of Principal Components Analysis (PCA) for data concerning SEMC countries is provided, with a dataset originally comprising 11 variables. The PCA methodology is described in a non-mathematical fashion, also showing the basic steps in its application to this case. Two basic composite indicators, or „principal components“ are selected, one in connection with "human development" and the other with "being at risk of hunger", and countries in the sample are ranked according to their situation with regards to these dimensions.