

## **FOOD SECURITY BETWEEN ENVIRONMENTAL RISK FACTORS AND POPULATION OVERGROWTH**

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### **Abstract**

*All the food security strategies must be holistic ones, facing problems from malnutrition, productivity, income for small food producers, the sustainable use of land, bio-diversity and not least the use of future genetic discoveries.*

**Key words:** pollution, overpopulation, food security, environmental risk factors, food security, bio-diversity, bio-genetics

### **INTRODUCTION**

Food supply is facing the deepest crisis ever since humanity exist, both because pollution from human activities and overpopulation. In a few decades the world population will reach approximately 10 billion people which could bring a tremendous pressure on the food production. Eventhough it seems that the firsts proves of fighting pollution could be slowly seen, by the escalation of green technologies, in the food supply field there are still many things to be done, in particular in adapting new agricultural technologies to mass production.

### **MATERIAL AND METHOD**

Pollution is the largest environmental cause of disease and premature death, in particular in under-developed countries or among the low-income population (92%). Deaths caused by pollution are three times more than those caused by AIDS, tuberculosis and malaria, all combined, and 15 times more than deaths caused by wars. Pollution affects children from utero to infancy-hood, causing disfunctions in growth, disabilities or even premature-death. Pollution, in particular in under-developed or developing countries, consists mainly of industrial and car emissions or other chemicals (70% of pollution related diseases are non-communicable diseases- "Global Action Plan for the prevention and control of non-communicable Diseases").

## RESULTS AND DISCUSSION

Pollution-related diseases has an impact on the labor productivity which consequently influence the annual GDP (in particular in urban areas where positive ions levels too low- in some urban areas more than 10 times the normal level); the lack of productivity could pull down the annual GDP by 2%. The total lost in global GDP – 6 trillion \$ (6.2%). Pollution has a great impact on the health budgets, in some countries reaching up to 7% of the health budget, in particular in middle developed countries. It also affects global health, climate change, eco-systems and food global capacity of the earth.

Main pollution sources, all of them coming from human activities are: fossil fuel combustion ( 85% of airborne); electricity-generating plants, who run on fossil fuels, in particular coal; chemical industries, mining industry, deforestation.

Main types of pollution caused also by human activities are: air pollution; chemical pollution; soil pollution (from industry, mining, electricity plants), mechanised agricultural.

For example if we analyse chemical pollution it can be seen that from 1950 more than 140.000 new chemicals and pesticides were synthesised and from those more than 5.000 of chemicals and pesticides are directly dispersed in the environment and less than 50% of those chemicals have undergone any test for toxicity or have been accurately market tested and which more important neither the effects on human health never been examined.

Unfortunately the middle-developed and low-developed countries use many of these half-tested chemicals so therefore they will face the biggest health problems in the near future.

Cities, where 55% of the population live and by 2030, more than 65% will, are most affected by pollution- traffic gas emissions, energy consumption, construction, industry affecting the health of its inhabitants but also the economic performance of the companies from the urban areas.

## CONCLUSIONS

We all know about the facts and effects of the pollution and its negatively influence human healths but we need to develop ways to stop or even decrease the pollution level. In the following we present some of the ways:

- make pollution prevention strategies a political priority, national or local – they can be imported from countries where the results are significant; including pollution issues in the development planning at all levels;
- increase financing for environmental friendly technologies;
- setting up pollution monitoring systems;
- involving all the members of the community - individuals, companies, authorities - in pollution control.

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