

« The most important Reserves of Implementing Food Program in Uzbekistan »

Speech of the Belgian Senator

Dominique TILMANS

« Assuring Food Safety and Quality &
Contribution of the Space Sector »

1. Introduction

- Congratulations to the Uzbek authorities !
- Judicious initiatives to:
 - ensure security, quality, quantity of food for « healthy and balanced nutrition »
 - shelter against too large & expensive imports
 - preserve from worldwide foodstuff shortage
 - Since 2010, wheat price ↗ 70 %,
 - FAO food grading is at the highest level,
 - Risk of 2nd world foodstuff crisis

NB : 9 billions of people in 2050...

2. Cooperation Belgium/Uzbekistan

- Cooperation to improve production quality of potatoe productivity
 - Subject elaborated by **Mr J-L Rolot**, Scientific Attaché from Walloon Agricultural Research Centre in Libramont - University of Gembloux

3. Importance of food Quality

- Uzbek population : 30 million = 60 % under 14th!
→ **quality** and **quantity** of food = challenge = **assurance of stability**.
- An opportunity for a young country
 - . to launch a new **sustainable** agricultural policy = important impact on the economic growth.
 - . to avoid the **foodstuff crisis** as in Europe :
 - 3.1. Mad cow disease
 - 3.2. Dioxin crisis

3.1. Mad cow disease : 1996 (United Kingdom)

Origin :

Experts discover animal flour (dead animals & carcasses) in the flour to feed cattle → degenerative fatal infection of the animal nervous system, transmissible disease to humans.

→ Health crisis : 204 victims

→ Socio-economic crisis :

- Cost : 400 millions of €, 100,000 T meat destroyed
- ↘ beef consumption
- Political crisis

Importance to protect consumers against fraud and abusive practices in food quality

3.2. **Dioxin crisis** : 1999 (Belgium)

Origin :

Experts discover **dioxin in the flour** to feed poultry !!

Dioxin < manufacturing of pesticide & herbicide, metallurgical & steel industry, incinerators,...

→ Heath crisis : ↗ of cancer prevalence, effect of accumulation in the body, + infects seriously the foetus.

→ Socio/economic crisis :

Cost : 1 billion € for Belgium, 9,400 T meat destroyed
+ 219,000 eggs

**→ Food Control require a Strategy;
Belgium decides to launch « AFSCA » in 2000**

4. Which food issues ?

Factors which contribute to potential hazards in food :

4.1 . **Institutions** :

- fragmented legislation
- multiple jurisdictions
- weakness in surveillance
- lack preventive controls

4.2. **Agriculture** :

- improper agricultural practices
- poor hygiene
- misuse of chemicals
- contaminated raw materials, ingredients in water

- genetically modified organisms
- allergens
- veterinary drugs residues

NB : Escherichia coli, Salmonella and chemical contaminants highlight problems with food safety.

4.3. **Economy/Sociology** :

- international food trade
- rapidly changing technologies in food production
- changes in life styles
- growing consumer awareness
- increasing demand for better information

5. A National Food Control System

Enable the country to develop an integrated, coherent, effective & dynamic food control system.

- **Objectives**

- Protecting public health by reducing the risk of foodborne illnesses;
- Protecting consumers from unsanitary, unwholesome, mislabelled or adulterated food;
- Contributing to economic development by maintaining consumer confidence in the food system

- **Scope**

- Food control systems should cover all food produced, processed and marketed within the country, including imported food = **each step in the chain must be operated in an integrated way.**

6. Basic for a National Food Control System

- **Inspection Services**

Administration and implementation of food laws require a qualified, trained, efficient and honest food inspection service.

- **Laboratory Services**

Food Monitoring and Epidemiological Data

- **Information, Education, Communication and Training**

Delivery of information, education and advice to consumers across the farm-to-table continuum.

- **Funding from the National Government**

7. Contribution of the Space Sector

7.1. Agriculture face to several challenges :

- ✓ Water shortage and evapo-transpiration
- ✓ Vagaries of weather
- ✓ Climate changes
- ✓ Productivity of crops
- ✓ Expensive & dangerous fertilizers & other chemical products (herbicides,...)
- ✓ Roughness, salted,..., soil
- ✓ Solar/radiation

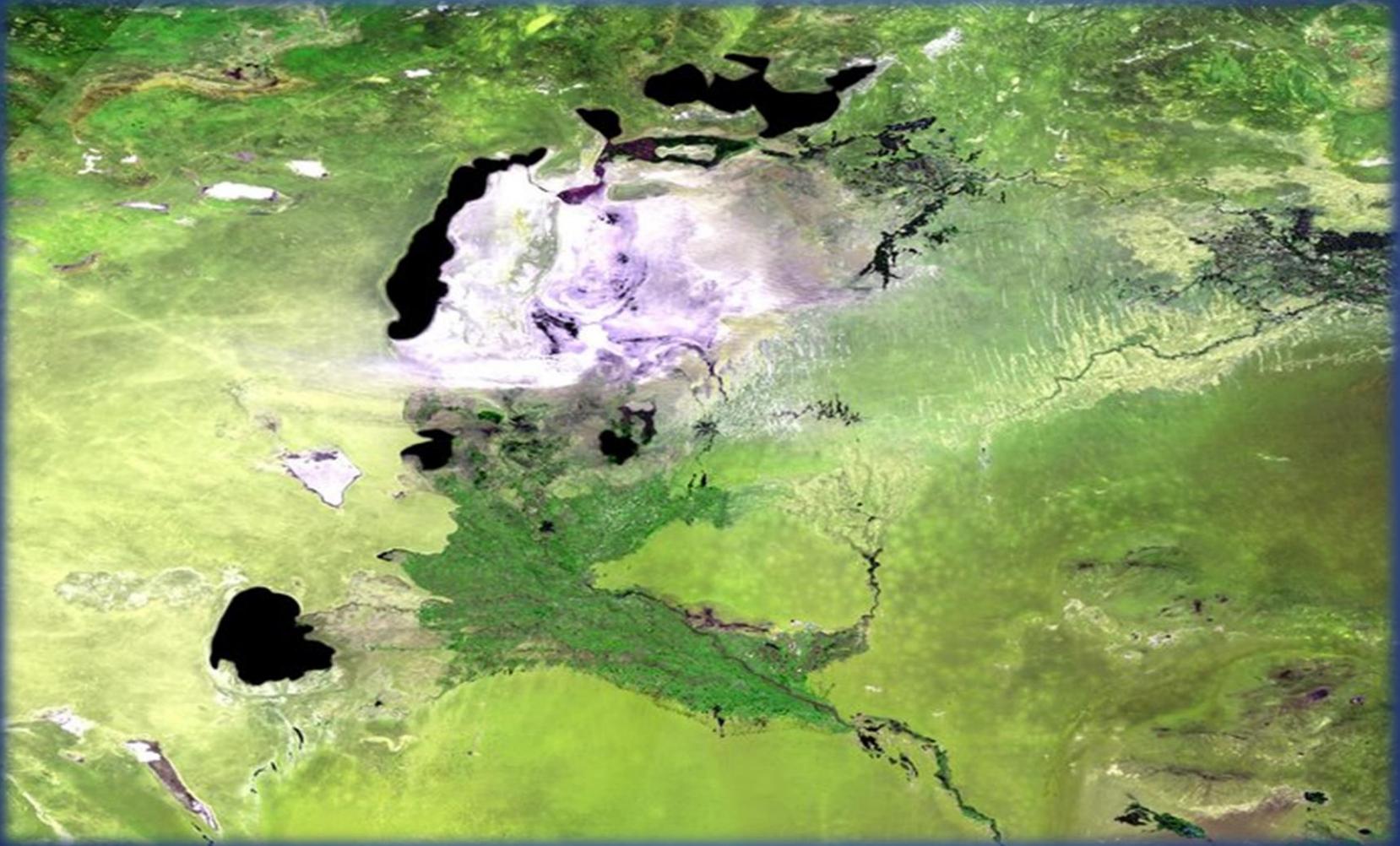
7.2 Key information from dozen satellites

- ✓ Satellites : SPOT, Sentinel, Proba, Envisat, Pleiades...
- ✓ Altitude : 800 km high
- ✓ Pictures : resolution 10 meters (2,5m Spot 5 – 70 cm Pleiades !)

7.3 Satellites can give information on

- ✓ Pressure of soil
- ✓ Availability of water on/under the ground
- ✓ Climate, weather forecast
- ✓ Natural resources
- ✓ Bio diversity monitoring
- ✓ ...

7.4. View of Aral Sea from Proba-V satellite
13th May 2014



7.5. Help for decisions in agricultural practices

- ✓ Timing quality and quantity :
 - to scatter
 - to fertilize
 - to harvest...
- ✓ To detect diseases of crops
- ✓ To modulate irrigation
- ✓ To diagnose abnormal growth/quality performance/hydric stress
- ✓ ...

7.6. Mars Unit of the EU

- ✓ Expertise in crop modeling, agro-meteorology, sampling methods, environmental spatial analysis, econometries & global data infrastructures.
- ✓ A skill-set gives forecasts for the management of agricultural practices & early warnings on Food Security.

7.7. Pilot bulletin for Central Asian Countries

- ✓ The Bulletin is dedicated to analysis of the agro-meteorological situation in 40 countries, in Central Asia : Kyrgyzstan, Tajikistan, **Uzbekistan**, Turkmenistan, Georgia, Armenia, Azerbaijan, Iraq, Iran, and Afghanistan.
- ✓ Based on the analysis of the dekadal meteorological data, dekadal maps statistical crop yield and areas data for the last 11 years. Data are preprocessed by VITO (BE).

Spatial Sector, a new dimension for Uzbekistan...

