Innovative development as a basis for the competitiveness of the agricultural sector

Sergey A. Volodin
Doctor of Economics, Associate Member of National Academy of Agrarian Sciences of Ukraine
Director General of the Institute of Innovative Providing
Principles of State Innovative Policy

The Aim – transformation of agro-industrial complex into effective, competitive in domestic and foreign markets sector of economics by means of technological and technical re-equipment of backbone branches of agro-industrial complex.

Priority task – providing of constant highly-productive, profitable, science-intensive ecologically safe agriculture and food sector, creation of conditions for their innovative, investment and integration development.

Science tasks – scientific providing of development of agro-industrial complex branches, research of already existing and creation of new technologies, on the basis of obtained knowledge development of scientific elaborations concerning innovative development of agro-industrial complex, which are able to provide competitive agricultural products.

Expected results:
• Production capacity increase, specialization and concentration of agro-industrial production;
• Creation of innovations and according to research results their transfer to agricultural production and processing industry, formation of innovative resources market and commercial output;
• Investment providing of priority agro-industrial branches development.
Innovative development of agro-industrial complex

Realization of Innovative Development Model

State Innovative Policy
- Regulatory-legal provision of innovative development
- State order for scientific and innovative products

Innovative science potential
- Innovative transformations of agricultural science and education system
- Program-target science-innovative production

Innovative development stimulation

Increase of scientific elaborations effectiveness

Innovative development of agro-industrial complex

Innovative products output

Formation of innovative market

High-effective agricultural production
- Development of integrated active innovative agricultural enterprises
- Involvement of venture investments in innovations reclamation

Infrastructure of science-intensive market
- Development of market innovative infrastructure
- Creation of market mechanism of innovations transfer
Creation of competitive scientific and innovative products

**Research of scientific elaborations potential**
- Scientific and technical elaborations of domestic scientific institutions and educational establishments
- Science-intensive technologies of leading foreign developers and implementers
- Modern processes of agricultural production and needs of their technical and technological provision

**Transformation of scientific elaborations in innovative products**
- Selection of scientific elaborations with innovative potential
- Transformation of scientific elaborations in innovative products
- Approbation of innovative products (elaborations, resources, services) in terms of production conditions

**Formation of innovative offerings for agricultural market**
- Market presentation of innovative proposals for their further implementation in agro-industrial production
- Protection and safety of intellectual property rights
- Expertise and evaluation of economic part of innovative proposals, capitalization of their intangible assets
Transfer of innovative products within venture business projects

Infrastructural provision of innovative projects
- Transformation of scientific institutions and their experimental and production base into agricultural market formations
- Involvement and accreditation of innovative projects providers
- Corporatization of state-private partnership relationships of joint project realization members

Investment provision of innovative projects
- Research of investment attractiveness of innovative projects
- Development of project offerings concerning involvement of venture capital in objects of innovative development
- Business planning of protection and payback of investments
- Conduction of transactions of innovative projects investment involvement

Innovative planning of agricultural technologies
- Research of optimal conditions of innovative products transfer to agrarian market in project format
- Development of innovative technologies transfer business projects, their technical and economic background and evaluation
- Conduction of business projects realization concerning commercial implementation of innovative projects
Cluster Model of Scientific and Production Integration

Scientific park “Biosystem” the basis of Institute of Bioenergy Crops and Sugar Beet of National Academy of Agrarian Sciences

**Scientific institution**
- Bioadaptive resource-saving technologies of sugar beet growing
- BA – new generation hybrids of sugar beet
- Resource-saving technologies of bio-energy crops growing and their processing into bio-fuel

**Innovative business-incubator**
- Market expertise and evaluation of innovation potential of science-intensive agricultural technologies
- Elaboration and implementation of innovation and investment business projects in agro-industrial production
- Creation and conduction of activity of innovation providers of scientific park projects

**Research stations and farms**
- Approbation of new genetic materials and technologies
- Production of BA-hybrids of sugar beet seeds
- Production of genetic phyto-resources for bio-energy crops growing
- Production of bio-oils and bio-fuel

**Venture enterprises**
- Technical and technological re-equipment of agricultural production by means of investments
- Supply of material and technical resources on the basis of forward conditions
- Contracts creation and realization of science-intensive and commodity products

**Science-innovative Results**

**In sugar beet sphere**
- Increase of realization of sugar beet seed of domestic selection from 20% in 2010 up to 50% in 2015
- High level of sugar with potential of 18-20% of sugar outcome
- Provision of productivity up to 10-12 tons of sugar per hectare

**In bio-energy sphere**
- Selection and technological provision of 30% of bio-energy crops market
- High-level phyto-resources yield (6-25 t/ha)
- Production of ecological bio-fuel from biomass on low-yielding soils
Experience of Euro Integration of Poland In Agricultural Sector

Consequences of Inclusion to Common EU Space

• Role increase of agricultural manufacturers, considerable production expansion for foreign market needs
• Restructuring of agricultural sector. Extrusion of farms and their cooperative societies by big private holding groups and companies
• Main priority in investment support for big agricultural enterprises, which presented ambiguous results in investment effectiveness
• Products price increase and sometimes their quality deterioration

Factors of Productivity and Effectiveness Increase

• Investments expansion to financial assets
• Investment orientation for innovative development, including reclamation of biotechnologies in plant-growing and animal breeding, organization of implementation of new technique and technology in agro-industrial production by improvement of organizational management, social capital increase
Directions of cooperation in the framework of European integration

Joint agricultural researches in European research zone within the program Poland SCAR Membership

• Development of viable agricultural industry
• Biotechnology, bio-adaptive agricultural crops
• Qualitative food network, safe and functional products
• Alternative and renewable energy source (green energy)

Common projects within the Agreement on Partnership and Cooperation Ukraine-EU

• Assistance for farms
• Investments involvement in priority sphere of agro-industrial production
• Implementation of Poland experience in creation and development of integrated large-product agricultural formation of production, processing and realization of agricultural products and food
The Institute of Innovative Providing is your reliable partner

The Institute is established as non-governmental scientific institution in the system of agricultural science for its structural reformation on the market principles, provision of entrepreneurial relationships of scientific institution with innovation providers and venture investors of science-intensive agricultural market.

The Institute provides agricultural market research, creation and transfer of science-intensive technologies in the sphere of agricultural products manufacture, its processing and realization, security and protection of intellectual property objects, their evaluation and conduction in the process of capitalization and commercialization within business-projects.

The Institute carries out legal and financial support of investment projects concerning definition of agro-industrial objects of priority innovative development in Ukraine, reasoning of possibility of involvement and effective use of venture capital, creation of integrated systems of production and realization of agricultural output.
We wait for cooperation!