



Analytical Unit for Agrifood Policy (AU-AP)

Outline

1. **Brief background**
2. **The proposal: needs**
3. **The proposal**
4. **Additional information**

1. Brief background

Experience of other countries – basic models:



In-house

research institutions in the structure of ministries of agriculture or government **that may involve contractors** (USA, EU, Poland, Australia)



State research institutions

outside the structure of ministries or government, financed by the state, **also self-financed by participating in projects and providing consultations, analytics for business** (Germany, Japan)



Hybrid model



Experience of other countries – in-house institutions

- ▲ USA
- ▲ European Union
- ▲ Australia



USA

The United States Department of Agriculture is the policy-making institution in the field of agriculture (**USDA**).

There are a number of research centers within **USDA**, the main ones being the **Agricultural Research Service** (focusing on the natural sciences) and the **Economic Research Service** (focusing on the social sciences).

The ERS is responsible for providing consulting and advisory services for policy formation in agriculture. All centers are directly funded by the USDA.



ERS provides advisory services to both USDA and the White House directly, Congress, and state governments. Separately, the USDA has the National Agricultural Statistics Service (**NASS**), which is responsible for collecting and processing data.

The most popular ERS research products include:

- forecasts of agricultural business and household income;
- cost of production;
- forecast reports on major crops and livestock products;
- annual forecasts for the agricultural sector, consumer price index (CPI) forecasts for food.



European Union

The main institution providing scientific support to the policy-making process is the **Joint Research Center (JRC)**. The JRC is funded by the European Commission and conducts research covering the full range of European Commission policies, as well as provides research grants to private and public contractors.

An example of an evidence-based policy is the development of a legal instrument for the reuse of water in agricultural irrigation and aquifer recharge.



Australia

The Ministry of Agriculture, Fisheries and Forestry has 2 research centers under its jurisdiction: **Australian Bureau of Agricultural and Resource Economics and Sciences** (ABARES) and **Plant Innovation Center** (PIC). Both of them are funded by public funds from the **ministry's budget**. ARABES focuses on economic analysis of policies and markets, while PIC is engaged in research in the natural sciences and agronomy.

An example of evidence-based policy is the introduction of the National Water Infrastructure Development Fund. This project invested in improving water infrastructure, especially in drought-affected regions, and analyzed the impact of improved infrastructure on reducing drought risk and increasing agricultural productivity.



Experience of other countries – **institutions outside the structure of ministries**

 **Japan**
Germany



Japan

The main research body is the **National Agriculture and Food Research Organization** (NARO). The organization is an independent government agency funded directly from the state budget. NARO has **12 research institutes** covering the full range of research in the field of agriculture and food. Additionally, the Ministry of Agriculture, Forestry and Fisheries has the Agriculture, Forestry and Fisheries Research Council (AFFRC), whose main purpose is to coordinate research, set basic goals and policy directions, and support research conducted by regional administrations and the private sector.

To promote evidence-based policy making in the agricultural sector, Japan conducts an agricultural and forestry census. The census covers more than 2 million farmers and conducts a complete survey of agriculture and forestry every 5 years.

Germany

The government does not have a single research institution; instead, research and analysis for policy-making is conducted by a number of scientific institutions, research organizations and advisory committees that provide expertise on specific agricultural issues.

These institutions include the **four federal research institutes**, the **Federal Institute for Risk Assessment** (directly subordinated to the government), the **German Biomass Research Center**, and **six Leibniz Institutes, which are jointly founded by the Ministry of Food and Agriculture and the governments of the states in which they are located**. The research activities of the institutes are not limited to national policy and also cover topics of the EU CAP, international treaties, etc.

In case of insufficient capacity of these institutions, the Ministry also hires **private contractors**.





Germany

Examples of Germany's evidence-based policy include the study "Germany's Greenhouse Gas Neutrality: Impact on the Economy and Rural Living Conditions" or "An Approach to Rehydrating Organic Soils in Germany."



Experience of other
countries –
hybrid model

▲ Netherlands
▲ Great Britain



Netherlands

The Ministry of Agriculture, Nature and Food Quality engages contractors to conduct research on a **contractual basis**. Contractors can be either public or private research or analytical organizations. Research is coordinated by the **Scientific Council for Government Policy**, an independent state institution funded from the state budget.

The main contractor is the **Agricultural Economics Research Institute** (LEI Wageningen), which is the largest agricultural research center in the Netherlands and provides research support and economic analysis of agricultural policy. It consists of 9 research institutes. Its main client is the Ministry of Agriculture, Nature and Food Quality, and it also conducts research for other government agencies, the private sector and NGOs.



The Netherlands has focused its efforts on closing the mineral and resource cycle as much as possible, and increasing attention to biodiversity. The WUR presented a concept page "Kringlooplandbouw" (circular agriculture), which outlined the vision of the transition of Dutch agriculture towards a circular cycle.



Great Britain

The Department for Environment, Food and Rural Affairs (DEFRA) has a **Science Advisory Board**, which is a public body **outside the ministry**. It is sponsored by the ministry and provides independent scientific advice on DEFRA policy. In addition, the ministry actively awards contracts for **contractors (analytical and research institutions) to conduct research on a competitive basis**.



Great Britain

An example of evidence-based policy in the UK is the Nitrate Vulnerable Zones Regulations. The UK government conducted a study to assess the extent of water pollution caused by agricultural nitrate runoff. This study included monitoring nitrate levels in water bodies and their impact on aquatic ecosystems. Using the evidence gathered, the government developed regulations that define the agricultural practices allowed in nitrate-vulnerable zones. These rules aim to reduce nitrate pollution by controlling fertilizer use and implementing best management practices.

The situation in Ukraine :

The Ministry of Agrarian Policy **relies on a variety of sources** to collect data when formulating policy.

Data holders can be:

- other government agencies;
- research institutes;
- higher education institutions;
- associations of producers;
- public consultations.

However, these sources have limitations: methodological capabilities, strengthening and expansion of expert and technological bases, long-term planning, efficiency, and representativeness of information. Therefore, in order to provide analytical support for the formation of Ukraine's agricultural policy, there is a need to consolidate capacities for the maximum possible and long-term support of the Ministry.

2. The proposal: needs

AU-AP requirements

Experts with international experience, a set of modern methodological skills, and fluency in Ukrainian and English

Market-based labour conditions

Full integration of the analytical unit into the work processes of MAPF

Independence from political leadership (minister, deputies), long-term horizon, diversification of funding

The ability to maintain scientific integrity and objectivity without interfering with the political decision-making process

AU-AP research topics

Commodities coverage: grains and oilseeds and their processing products, vegetables and pumpkin-likes, field vegetables, technical crops, perennial crops, energy crops, livestock and livestock commodities, GMO, organic commodities.

Farming units coverage: agricultural enterprises, agricultural holdings, farms and rural households.

Agricultural policy and policy of trade of agricultural commodities

1.1. examine program trends and policy changes. Methods in essence: qualitative and quantitative description

1.2. analyze expenditures. Methods in essence: qualitative and quantitative description

1.3. ex-post and ex-ante policy impact analysis, analysis of impact of specific instruments (subsidies, taxes, investments etc.). Methods in essence: econometric analysis, partial equilibrium modelling, optimization modelling

1.4. development of policy instruments. Methods in essence: qualitative and quantitative description, econometric analysis, partial equilibrium modelling, optimization modelling

AU-AP research topics

Farm Economy, Practices and Management

2.1. analysis of financial performance of farms, production factors use and efficiency and costs, operating profit margin, the current ratio of assets to debt, rate of returns to investments etc. Methods in essence: quantitative description with application of microeconomic and investment analysis (e.g., optimum and maximum production level, production frontier analysis etc)

2.2. description of farms and farm structure “farm at a glance”: analysis of data on production practices: livestock rearing (e.g., grazing open-air, animal welfare standards), crops production (e.g., till, no-till), types of contracts, labor, machinery used, structure of agricultural enterprise, etc. Methods in essence: quantitative and qualitative description, visualization

2.3. analysis of farms’ performance with respect to different standards and requirements. Methods in essence: econometric analysis, descriptive methods

2.4. assessment of access to markets and services

AU-AP research topics

Agricultural sector, markets and trade

- 3.1.** assessment of the agricultural export and import potential
- 3.2.** assessment of the potential of specific agricultural sectors and processing
- 3.3.** assessment of the (potential) returns from public investments
- 3.4.** prices review, monitoring and forecasting
- 3.5.** price transmission analysis
- 3.6.** analysis of stakeholders' market power
- 3.7.** value chain and value added analysis
- 3.8.** analysis of input markets and sectors, development potential
- 3.9.** yields, cropping patterns, areas analysis and forecasting
- 3.10.** domestic and foreign demand analysis, supply and demand balances

Methods is essence: econometric analysis, equilibrium modelling, neural networks and machine learning, big data analysis, GIS and remote sensing

AU-AP research topics

Losses, damages and recovery needs estimation

4.1 war-time estimation of losses, damages and needs

4.2 ex-ante and ex-post analysis of the efficiency of the reconstruction and recovery support due to the war and post-war.

Methods in essence: quantitative and qualitative analysis, econometric analysis, equilibrium modelling, optimization modelling

Food and Nutrition Security

5.1 food security index. Methods: econometric based modelling approaches

5.2 consumption patterns analysis

5.3 food accessibility analysis

5.4 household expenditures on food

5.5 analysis of the need for food assistance

Methods in essence: econometric analysis, quantitative and qualitative descriptions

AU-AP research topics

Natural Resources & Environment

- 6.1 irrigation and water use by farming
- 6.2 impact of agriculture on climate change (e.g., GHG emissions)
- 6.3 use of organic fertilizers and impact and use of nature-based agricultural production methods
- 6.4 agriculture and soil erosion
- 6.5 agriculture and biodiversity

Methods is essence: econometric analysis, quantitative and qualitative descriptions, biological modelling

Rural Economy & Population

- 7.1 rural development markers and impact assessment
- 7.2 role of agriculture in development of rural communities

Methods is essence: econometric analysis, quantitative and qualitative descriptions
Farmland market analysis of key trends and developments on the farmland market.
price formation on the farmland markets.



Possible solutions for Ukraine



Міністерство
аграрної політики та
продовольства України



Український
науково-дослідний
інститут продуктивності
агропромислового комплексу



1

Establishment of a separate structural unit for analytical support within the structure of MAPF

2

Establishment of a separate structural unit for analytical support within the structure of the Research Institute "UKRAGROPROMPRODUCTIVITY"

3

Establishment of an analytical center outside the structure of MAPF

1

Establishment of a separate structural unit for analytical support within the structure of MAPF

1. The establishment of a separate structural unit for analytical support within MAPF during martial law is problematic due to restrictions on increasing the maximum number of employees of the ministries' staff, but it is possible by reducing vacant positions in other structural units;
2. Employees of the separate analytical unit within MAPF will be civil servants. To fill a vacant position, they must pass a competition and submit an income declaration upon taking office and annually. This may be a factor that will create an obstacle in attracting experts to work in the think tank - (lack of Ukrainian diploma, staying abroad, unwillingness to declare property).
3. Remuneration of the think tank's employees will be financed from the state budget and will consist of a base salary, possible bonuses and a bonus of up to 30% of the salary.

1

Establishment of a separate structural unit for analytical support within the structure of MAPF

To implement such a proposal, it is necessary:

Develop and approve a new structure of MAPF.

Initiate amendments to the state budget to increase spending on labor.

2

Establishment of a separate structural unit for analytical support within the structure of the Research Institute "UKRAGROPROMPRODUCTIVITY"

1. Employees of the Institute are not civil servants, but receive salaries from the state budget. The employees of the Institute are not subject to the requirements of the Law of Ukraine "On Civil Service" regarding remuneration - the salary of the Institute's employees may be higher. But it must be approved by MAPF. In addition, the employees will not be subject to the requirements of the civil service legislation on competitions and income declaration.
2. The Institute may enter into contracts for the provision of analytical services with third-party organizations/individuals. That is, analysts may work as self-employed persons rather than under labor law.
3. The Institute may attract other funding not prohibited by law, such as grants or material and technical assistance. Such revenues may become a source of funding for the activities of the Think Tank.

2

Establishment of a separate structural unit for analytical support within the structure of the Research Institute "UKRAGROPROMPRODUCTIVITY"

To implement such a proposal, it is necessary:

- ▲ Develop and approve an order to establish the think tank.**
- ▲ Develop and approve the budget and staffing of the think tank.**

The final proposal

Stage 1: The Auxiliary team

Shorter term solution:

- carried out by a team of experts, specifically assigned within a reputable research or educational institution
- supervised by the Department of Strategy of the Agro-Industrial Complex at MAPF
- minor consultancy contracts with the Ministry to create the institutional connection

Stage 1: The Auxiliary team

Team:

- 1 Senior economist – Leader of the group (10+ years of relevant experience)
- 2 Experienced researchers (5+ years of relevant experience)
- 2 Junior researchers (advanced computation and writing skills)

Legal changes required: none

Stage 2: The Auxiliary Team + MAPF Internal Team

Longer term solution:

- An Agrifood Policy Analytical Department must be created within MAPF
- The employees shall have contracts as the rest of the MAPF employees, their salaries shall be market-oriented
- The requirements of the employees shall be similar to those of the Auxiliary Unit
- Expansion from 5 to 40 employees (1 head, 2 deputy heads, 1 secretary/assistant, senior and junior researchers)
- The Auxiliary team will sign the Cooperation Framework Agreement (which will foresee the remuneration for the outsourced work) with MAPF in order to support the functioning of the newly created MAPF Internal team. Some or even all of the team of the Auxiliary Team may become the MAPF Internal Team.
- The MAPF consultancy contracts of The Auxiliary Team will be broken

THANK YOU FOR YOUR ATTENTION