Ukrainian experience in Agro-Food value-chain statistics

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The concept of agro-industrial complex

- In a broad sense **Agro-industrial complex** brings together the activities aimed at the production and processing of agricultural raw materials and obtaining from it the products that are brought to the end user. APK includes 4 areas:
  1. Agriculture (crops, livestock);
  2. Production means of production and material resources for agriculture;
  3. Processing of agricultural raw materials;
  4. The infrastructure of agriculture: transportation, storage, sale of agricultural products of food etc.
- The concept of the **Agro-food complex** brings together the production and processing of agricultural raw materials.
- Today in Ukraine the notion of Agro-industrial complex is not legally established. Agrarian and industrial indicators as a whole complex SSSU does not compute. So, we keep it separately.
Agro-Food chain statistics

- Production of agriculture products
- Realization (sale) of agricultural products
- Admission for processing of agricultural production
- Processing and sale of food products
- Export, import
- Consumption (use) of agricultural production and products of its processing
- Domestic consumption
Sources of information

Statistical surveys of:

1) Agricultural enterprises
   - production of crops and livestock (monthly and annual)
   - volumes and average prices of agricultural products (monthly and annual)
   - the costs and profitability of agricultural production (annual)
   - stocks of grains, oilseeds and sugar (monthly)
   - structural survey of enterprises (annual)
   - average prices for the products consumed in agriculture (annual)

2) Households
   - the production of crops and livestock products (monthly and annual)
   - volumes and average prices of agricultural products (monthly and annual)
   - stocks of grains, oilseeds and sugar (monthly and annual)

3) Processing enterprises
   - volumes of admission to the processing of livestock products, cereals and oilseeds (monthly)
   - the volume of industrial production (monthly)
   - sales volumes of industrial production (annual)
   - producer prices (monthly)
   - structural survey of enterprises (annual)
Система статистических наблюдений в сельском хозяйстве

Producers of agricultural products

Agricultural enterprises (53 thousand)

Households (15 millions, inc. 5.3 mln. in rural area)

Big and middle enterprises (16 thousand)

Small enterprises (37 thousands) (< 50 employees or 100 hectares of land, or 30 cattle, or 2000 poultry)

Annual surveys

Monthly surveys

CALCULATIONS

Eжемесячное обследование сельхоздеятельности 29 тыс. домохозяйств в сельской местности

Survey of urban authorities

Household survey

Cencuses

Publications

Register AGRO
Surveys in agriculture

17 surveys

- 14 annual
- 1 half-annual
- 2 quarterly
- 7 monthly

24 questionnaires in 2015

- 2 cattle statistics
- 6 land statistics
- 8 sales of agricultural products and attending for processing
- 8 other
Statistical indicators in agriculture (01 NACE rev.2)

- physical and value volumes of agricultural production (at constant and current prices)
- index of agricultural production
- physical and value volume of sales (at current prices)
- index of sale prices of agricultural products by agricultural enterprises
- stocks of grains and oilseeds, sugar
- output, intermediate consumption, gross value added of agriculture (at current prices and prices of the previous year)
- natural and cost balance sheets of major products
- consumption by households of basic agricultural products
- cost and profitability of agricultural production, the indicators, which characterize the financial and economic results of agricultural enterprises activities
- other short-term indicators

International trade in goods

- export / import of agricultural products
Statistical indicators of food industry
(10, 11, 12 NACE rev.2)

- index of industrial production
- turnover index of industrial production
- wholesale prices
- other short-term indicators

Activity of business entities
- volume of sales (trade, services)
- industrial output
- value-added
- profitability of enterprises
- other financial indicators

Prodcom
- sales of products by categories

International trade in goods
- export/import of products by categories
Main classifications

NACE rev.2

CPA 2008

PRODCOM

HS-2012
### Gross value added (Percentage to total)

<table>
<thead>
<tr>
<th></th>
<th>2010</th>
<th>2011</th>
<th>2012</th>
<th>2013</th>
<th>2014&lt;sup&gt;1&lt;/sup&gt;</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gross value added (basic prices)</td>
<td>100,0</td>
<td>100,0</td>
<td>100,0</td>
<td>100,0</td>
<td>100,0</td>
</tr>
<tr>
<td>Agriculture, forestry and fishing</td>
<td>8,4</td>
<td>9,4</td>
<td>9,0</td>
<td>9,9</td>
<td>11,8</td>
</tr>
<tr>
<td>Industry</td>
<td>25,3</td>
<td>25,2</td>
<td>24,8</td>
<td>22,7</td>
<td>22,7</td>
</tr>
<tr>
<td>of which food, beverages and tobacco goods production</td>
<td>4,3</td>
<td>3,7</td>
<td>3,7</td>
<td>3,4</td>
<td>...</td>
</tr>
<tr>
<td>...</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<sup>1</sup> Preliminary data.
### Gross production by main kinds of agricultural production

(percentage to total; in 2010 comparable prices)

<table>
<thead>
<tr>
<th></th>
<th>2005</th>
<th>2010</th>
<th>2012</th>
<th>2013</th>
<th>2014</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Gross production – total</strong></td>
<td>100,0</td>
<td>100,0</td>
<td>100,0</td>
<td>100,0</td>
<td>100,0</td>
</tr>
<tr>
<td><strong>crop production</strong></td>
<td>63,7</td>
<td>63,9</td>
<td>66,8</td>
<td>69,6</td>
<td>70,7</td>
</tr>
<tr>
<td>of which</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>grain and leguminous crops</strong></td>
<td>23,2</td>
<td>21,4</td>
<td>22,1</td>
<td>26,5</td>
<td>26,9</td>
</tr>
<tr>
<td><strong>industrial crops</strong></td>
<td>12,5</td>
<td>16,9</td>
<td>18,2</td>
<td>19,4</td>
<td>20,1</td>
</tr>
<tr>
<td><strong>potatoes, vegetables, food cucurbitaceous crops</strong></td>
<td>20,7</td>
<td>19,5</td>
<td>20,8</td>
<td>18,1</td>
<td>18,5</td>
</tr>
<tr>
<td><strong>fruits, berries, grapes</strong></td>
<td>4,0</td>
<td>3,6</td>
<td>3,4</td>
<td>3,6</td>
<td>3,1</td>
</tr>
<tr>
<td><strong>fodder crops</strong></td>
<td>2,9</td>
<td>2,1</td>
<td>1,9</td>
<td>1,7</td>
<td>1,7</td>
</tr>
<tr>
<td><strong>other crop production</strong></td>
<td>0,4</td>
<td>0,4</td>
<td>0,4</td>
<td>0,3</td>
<td>0,4</td>
</tr>
<tr>
<td><strong>animal production</strong></td>
<td>36,3</td>
<td>36,1</td>
<td>33,2</td>
<td>30,4</td>
<td>29,3</td>
</tr>
<tr>
<td>of which</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>livestock and poultry(breeding)</strong></td>
<td>13,0</td>
<td>16,0</td>
<td>15,0</td>
<td>14,1</td>
<td>13,5</td>
</tr>
<tr>
<td><strong>milk</strong></td>
<td>18,3</td>
<td>14,6</td>
<td>12,9</td>
<td>11,5</td>
<td>11,2</td>
</tr>
<tr>
<td><strong>eggs</strong></td>
<td>3,2</td>
<td>4,1</td>
<td>4,0</td>
<td>3,6</td>
<td>3,6</td>
</tr>
<tr>
<td><strong>wool</strong></td>
<td>0,0</td>
<td>0,0</td>
<td>0,0</td>
<td>0,0</td>
<td>0,0</td>
</tr>
<tr>
<td><strong>other animal production</strong></td>
<td>1,8</td>
<td>1,4</td>
<td>1,3</td>
<td>1,2</td>
<td>1,0</td>
</tr>
</tbody>
</table>
## Main agricultural production

<table>
<thead>
<tr>
<th>Production of main agricultural crops (gross harvest, thousands tons)</th>
<th>2005</th>
<th>2010</th>
<th>2012</th>
<th>2013</th>
<th>2014</th>
</tr>
</thead>
<tbody>
<tr>
<td>Grain and leguminous crops</td>
<td>38016</td>
<td>39271</td>
<td>46216</td>
<td>63051</td>
<td>63859</td>
</tr>
<tr>
<td>Sugar beet (factory)</td>
<td>15468</td>
<td>13749</td>
<td>18439</td>
<td>10789</td>
<td>15734</td>
</tr>
<tr>
<td>Sunflower</td>
<td>4706</td>
<td>6772</td>
<td>8387</td>
<td>11051</td>
<td>10134</td>
</tr>
<tr>
<td>Potatoes</td>
<td>19462</td>
<td>18705</td>
<td>23250</td>
<td>22259</td>
<td>23693</td>
</tr>
<tr>
<td>Vegetables</td>
<td>7295</td>
<td>8122</td>
<td>10017</td>
<td>9873</td>
<td>9638</td>
</tr>
<tr>
<td>Fruits and berries</td>
<td>1690</td>
<td>1747</td>
<td>2009</td>
<td>2295</td>
<td>1999</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Production of main animal products</th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Meat (in slaughter weight), thsd. t</td>
<td>1597</td>
<td>2059</td>
<td>2210</td>
<td>2389</td>
<td>2360</td>
</tr>
<tr>
<td>Milk, thsd. t</td>
<td>13714</td>
<td>11249</td>
<td>11378</td>
<td>11488</td>
<td>11133</td>
</tr>
<tr>
<td>Eggs, mln. pcs</td>
<td>13046</td>
<td>17052</td>
<td>19111</td>
<td>19615</td>
<td>19587</td>
</tr>
<tr>
<td>Wool, t</td>
<td>3195</td>
<td>4192</td>
<td>3724</td>
<td>3520</td>
<td>2602</td>
</tr>
<tr>
<td>Honey, t</td>
<td>71462</td>
<td>70873</td>
<td>70134</td>
<td>73713</td>
<td>66521</td>
</tr>
</tbody>
</table>
### Foreign trade in Agro-industrial complex (2014) (Percentage to total)

<table>
<thead>
<tr>
<th>Category</th>
<th>Export</th>
<th>Import</th>
</tr>
</thead>
<tbody>
<tr>
<td>Agro-industrial products (1-24 groups) in the whole trade</td>
<td>30.9</td>
<td>11.1</td>
</tr>
<tr>
<td>Total (1-24 groups)</td>
<td>100</td>
<td>100</td>
</tr>
<tr>
<td>Livestock</td>
<td>6.1</td>
<td>18.6</td>
</tr>
<tr>
<td>Crops</td>
<td>52.4</td>
<td>33.5</td>
</tr>
<tr>
<td>Grains</td>
<td>39.3</td>
<td>6.1</td>
</tr>
<tr>
<td>Oilseeds</td>
<td>10.1</td>
<td>5.1</td>
</tr>
<tr>
<td>Fats and oils of animal or vegetable origin</td>
<td>22.9</td>
<td>5.0</td>
</tr>
<tr>
<td>Food processed</td>
<td>18.6</td>
<td>42.9</td>
</tr>
</tbody>
</table>
10.4 Manufacture of vegetable and animal oils and fats 22,9%
10.3 Processing and preserving of fruit and vegetables 3,8%
10.2 Processing and preserving of fish, crustaceans and molluscs 0,7%
10.1 Processing and preserving of meat and production of meat products 12,7%
12.0 Manufacture of tobacco products 10,1%
11.0 Manufacture of beverages 12,3%
10.5 Manufacture of dairy products 10,0%
10.6 Manufacture of grain mill products, starches and starch products 3,3%
10.7 Manufacture of bakery and farinaceous products 5,8%
10.8 Manufacture of other food products n.e.c. 2,5%
10.81 Manufacture of sugar 4,4%
10.82 Manufacture of cocoa, chocolate and sugar confectionery 5,8%
10.83 Processing of tea and coffee 1,0%
10.89 Manufacture of other food products n.e.c. 2,5%
System of annual balances

Balances of food resources
- Meat, incl. categories
- Milk
- Eggs
- Potato
- Vegetables
- Fruits and grape
- Grain
- Sugar
- Oil
- Fish

Balances of main agricultural products
By the regions and categories:
- Agricultural enterprises
- Households
- Meat
- Milk
- Eggs
- Potato
- Vegetables
- Fruits
- Grape
- Grain
- Products from grain
Dissemination of statistical data

http://www.ukrstat.gov.ua

Statistical publications and bulletins, analytical papers, press-releases, replies to requests, methodology, etc.
Thanks for your kind attention!