THE ECONOMIC IMPACT OF THE CADASTRE IN THE REPUBLIC OF MOLDOVA ON THE SOCIETY AND NATIONAL ECONOMY
Main objectives:

• Property cadastre in the Republic of Moldova, its main characteristics and some issues of its development

• Economic and social effects of multipurpose cadastre on the society and national economy
Republic of Moldova

- Total area – 33,85 thous. km²
- Capital city – Chisinau
- Population – 4,3 mln. people
- Urban population – 47%
- Real property – 5,7 mln

The administrative-territorial structure:
- 3 municipalities
- 32 raions
- 1 autonomous territorial unit

5 municipalities
65 towns
1548 villages
Legal Basis for Property cadastre

*Law on Ownership* (1991) - the right to own buildings and structures

*Law on Normative Price of Land* (1997) – the right to own land parcels, inclusive agricultural land

*Law on Real Property Cadastre* (1998) – obligatory state registration of real property and property right holders

*Law on Real Property Tax (Title VI of Tax Code)* (2000) - ad valorem property taxation (market value based)

*Law on Valuation Activity (2002)* – market value, appraisers
Creation of the National Agency for Geodesy, Mapping and Cadastre

- Chisinau Mayor’s office
  Land Department 1994

- Ministry of agriculture
  Land administration
  Department 1996-1997

- Ministry of Housing utilities
  Bureaus of Technical Inventory (36 branches)

- State enterprise
  INGEOCAD 1997
  Ministry of Construction

- State enterprise
  Territory-planning Institute 1997
  Ministry of agriculture

- State enterprise Soil Protection Institute
  1998
  Ministry of agriculture
Advantages of the formation of the Agency

• Concentrate and integrate all key land administration functions within one organisation;

• Ensure focused development of uniform government strategies and policies in the field of land relations, geodesy, ground mapping, technical stock-taking, surveying and land cadastre;

• Ensure the information base and methodology framework underpinning the appearance of a new system for real estate registrations and cadastre;

• Create favourable conditions for the development of the real estate market and its infrastructure.
The World Bank and land administration in Moldova

• 1992 – recommendation to establish a land administration agency
• 1996-1997 – advisory support and financial assistance for the feasibility study for the real property cadastre creation
• 1998-2003 – First cadastre project: development of legal framework for the property cadastre, establishment of the system of cadastre offices, launching of the first wave of primary mass registration
• 2003 – present time – gave a power impulse for further development of the cadastre

It was an extremely successful World Bank-funded project that yielded certain major long-term drivers for Moldova’s economy. Although the project dates back almost 20 years as from now, Moldova’s system of real property cadastre and real estate registrations is still among the world’s best-ranking ones.
Real property cadastre, created in Moldova

*Real property cadastre* represents the multipurpose land information system of state registration of real property and the rights on them, as well as the assessment of these objects.

*The composition of real property cadastre:*

- **The legal part:** identification and composition of the object, property rights and their owners;
- **The technical part:** the characteristics of the land plot and buildings, plot plans and buildings (technical inventory and cadastre works);
- **The economic part:** the assessed value of real property objects for tax purposes.
Current registration of Real property transactions (1999 - 2018)
Real estate market activity
(statistics for 2018)

No. of transactions

- Agricultural Land Plots: 66.00%
- Non-agricultural Land Plots: 13.00%
- Single family houses: 11.00%
- Commercial & Industrial: 1.20%
- Other real estate: 2.60%
- Apartments: 6.20%
Rezults of mass registration

• The private ownership is recorded in real property cadastre as well as property main characteristics and property rights.
• Registered in cadastre:
  • 435 000 apartments, 680 000 individual houses
  • 110 000 commercial and industrial objects,
  • 3 520 000 agricultural land parcels, 80 000 lots dachas
  • 50 000 garages
• Total – 5 075 000 units

Remain nonregistered – about 625 000 property units (11%)
Primary mass (systematic) registration effects

- Security for property rights
- Security for lenders
- Reliable information for real property market
- True information for planning and land management, received by local authorities
- Market based value, provided for tax system
- Private sector development, appearance of new professions (surveyors, real estate agents, valuers)
The cadastre creation had the following results

- shape a civilized property market and ensure that the property rights are adequately guaranteed;
- ensure the accessibility of cadastre information to all players at the real property market and to the public administrations;
- increase revenues to local budgets and improve their structure through establishment of the optimal fees for real property uses;
- attract investments in real property; and
- enable proper effectiveness and promptness of the territorial administration
Key points of the Moldavian cadastre as of today

• **Unified system**
  – Property objects and rights in single organization and single system;
  – Land & constructions & premises;
  – Legal & Technical & Value data;
  – State and private properties are treated equally.

• **Digital**
  – Central database contains data for the whole country;
  – Cadastral and legal data (graphical and descriptive) covers 89% country;
  – Data exchange with other state registers
  – Data services available on-line (e-services)

• **Multipurpose**
  – Property guaranty, valuation for taxation, market service.

• **Self financed**
  – Full cost recovery from fees of the clients
ALRC functions in the real property valuation

• Establishment of a legal and regulatory environment of real property valuation;
• The development of national valuation standards, together with assessment public organizations;
• Building the infrastructure for property valuation market;
• Certification of real property valuers (public and private enterprises);
• The organization of training and qualification development of valuers (at the ARLC initiative, in 1997 there have been created specialties "Real property valuation", "Property Law", “Cadastre“ at the Technical University of Moldova);
Real property valuation for taxation purposes is:

• Carried out exclusively by cadastral authorities;
• Carried out based on a single methodology across the country;
• Carried out within the deadlines set by Parliament;
• Carried out in stages (by types of real property objects);
• Based on the information database of the cadastre and is carried out only after the registration of the real property in the cadastre;

The valuation result is the **appraised value** determined by the methods of market valuation. By its nature, it is the market value at the current use (i.e. value of the market type defined without the principle of HBU).
## The results of real property mass valuation

<table>
<thead>
<tr>
<th>Type of property</th>
<th>Quantity</th>
<th>Valuation data</th>
<th>Taxation started</th>
</tr>
</thead>
<tbody>
<tr>
<td>Apartments</td>
<td>435 000</td>
<td>1 june 2004</td>
<td>2007</td>
</tr>
<tr>
<td>Dwelling houses in urban areas</td>
<td>180 000</td>
<td>1 june 2005</td>
<td>2007</td>
</tr>
<tr>
<td>Commercial / industrial</td>
<td>110 000</td>
<td>1 june 2009</td>
<td>2010</td>
</tr>
<tr>
<td>Garages</td>
<td>50 000</td>
<td>1 june 2007</td>
<td>2010</td>
</tr>
<tr>
<td>Season houses</td>
<td>80 000</td>
<td>1 june 2007</td>
<td>2010</td>
</tr>
<tr>
<td>Agriculture land &amp; constructions</td>
<td>30 000</td>
<td>1 june 2010</td>
<td>2012</td>
</tr>
<tr>
<td>Dwelling houses in rural areas (in municipalities)</td>
<td>30 000</td>
<td>1 june 2011</td>
<td>2012</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>915 000 (16%)</strong></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
The implementation of the new market value based taxation system

• From year 2007 – taxation of residential properties and land plots for housing construction in urban areas

• From year 2010 – taxation of commercial and industrial properties, garages and season houses

• From year 2012 – taxation of plots of agricultural land with constructions on them, which are used in business

• Further step will be taxation of houses in rural areas, of agriculture land, special-purpose and unique objects. This categories of real property are not valued yet.
## Interrelation between the process of mass registration, assessment and the new real property taxation system

<table>
<thead>
<tr>
<th>Types of objects</th>
<th>Number of objects</th>
<th>Primary mass registration (period of time)</th>
<th>Date of assessment</th>
<th>New taxation system (year of implementation)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Apartments</td>
<td>435 000</td>
<td>2000-2002</td>
<td>June 1, 2004</td>
<td>2007</td>
</tr>
<tr>
<td>Residential houses in cities</td>
<td>180 000</td>
<td>2001-2003</td>
<td>June 1, 2005</td>
<td>2007</td>
</tr>
<tr>
<td>Garages</td>
<td>50 000</td>
<td>2006 - 2007</td>
<td>June 1, 2007</td>
<td>2010</td>
</tr>
<tr>
<td>Commercial and industrial real property</td>
<td>110 000</td>
<td>Registration in the assessment process</td>
<td>June 1, 2009</td>
<td>2010</td>
</tr>
<tr>
<td>Agricultural land - total, including:</td>
<td>4 005 000</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>- with constructions located on them</td>
<td>30 000</td>
<td>2009-2010</td>
<td>June 1, 2011</td>
<td>2012</td>
</tr>
<tr>
<td>- gardens</td>
<td>920 000</td>
<td>Not accomplished</td>
<td></td>
<td></td>
</tr>
<tr>
<td>- plots with season houses</td>
<td>80 000</td>
<td>2006-2007</td>
<td>June 1, 2007</td>
<td></td>
</tr>
<tr>
<td>- land for agricultural use</td>
<td>3 000 000</td>
<td>1998-2003</td>
<td>Not accomplished</td>
<td></td>
</tr>
<tr>
<td>Residential houses in villages</td>
<td>900 000</td>
<td>550 000 objects</td>
<td>Not accomplished</td>
<td>Not accomplished</td>
</tr>
<tr>
<td>Special-purpose property, other objects</td>
<td>20 000</td>
<td>Sporadic registration</td>
<td>Not accomplished</td>
<td>Not accomplished</td>
</tr>
<tr>
<td>total</td>
<td>5 700 000</td>
<td>5 075 000 (89%)</td>
<td>915 000 (16,0%)</td>
<td>16,0% / 84,0% 19</td>
</tr>
</tbody>
</table>
Composition of real property objects in Moldova

- Apartments: 70%
- Residential houses in cities: 18%
- Residential houses in villages: 6%
- Commercial and industrial objects: 3%
- Agricultural land - total: 1%
- Special - purpose property, public: 2%
- Private: 1%
- Publicly owned: 3%
- Special-purpose: 6%
## Real property tax revenue

(Thousand MDL)

<table>
<thead>
<tr>
<th></th>
<th>2007</th>
<th>2010</th>
<th>2013</th>
<th>2018</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>a. Land tax</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>174 225</td>
<td>180 501</td>
<td>185 440</td>
<td>155 859</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>-11%</td>
</tr>
<tr>
<td><strong>b. Tax on Real Property</strong></td>
<td>52 032</td>
<td>100 540</td>
<td>128 553</td>
<td>358 369</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>+588%</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>226 257</td>
<td>289 248</td>
<td>313 992</td>
<td>514 228</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>+39%</td>
<td>+127%</td>
</tr>
<tr>
<td><strong>Total tax revenue to central government</strong></td>
<td>10 733 225</td>
<td>11 491 678</td>
<td>16 118 600</td>
<td>16 475 611</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Total tax revenue to local government</strong></td>
<td>2 546 785</td>
<td>2 141 618</td>
<td>4 113 100</td>
<td>3 756 804</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>% property tax in local budget tax revenue</strong></td>
<td>8,9</td>
<td>13,5</td>
<td>7,6</td>
<td>13,7</td>
</tr>
</tbody>
</table>
Main results

• Most of the real property is registered in the cadastre system;
• Mass valuation was performed for main types of real property (mainly those located in urban areas);

**Cadastre:**
- creates the basis of a new system of real property taxation;
- provides a sustainable economic development of the country and of the administrative units;
- promotes equitable redistribution of the tax burden;
- corresponds with the best international practice.
- The cadastre data base undergoes updates on regular basis;
- According to the international Doing Business ranking, Moldova was steadily ranked 16-20 in the property registrations category among 189 countries from the world.
System approach to land administration arrangements

Furthermore, speaking about the advantages of the land administration in Moldova, it is necessary to mention that the system approach is being applying currently to all the levels of the land administration in the country.

The Agency is a public authority developing government policies and regulating four interrelated fields: land relations, cadastre, property valuation, geodesy and geospatial data. This approach ensures join and cross-referenced development in these fields as well as synergic effect.
Institutional effect of the ALRC development
Institutional effects at the level of ALRC

• synchronise the development of the regulated activities in terms of its timing as well as direction;
• ensure and facilitate understanding of the common challenges, risks and development trends;
• implement best international practices;
• develop an integrated development strategy common for all of its activity areas;
• save time, efforts and tangible resources required for the management of the above activities.
Network of cadastre offices

Agency for Land Relations and Cadaster

State Enterprise Cadastru (central level)

Territorial cadaster offices – 39 branches

- Develops uniform cadastral policy
- Regulates the field of cadaster
- Approves technologies and tariffs

- Develops techniques instructions and software for property registration, measurements, valuation

- Property registration
- Maintaining of cadaster data
- Property valuation
The synergistic effect of the co-operation between the real property cadastre and fiscal cadastre
Synergistic efficiency calculation

\[ e \sin = \Delta V_f : (\sum \text{C} \text{ cad} \times K_i + \sum \text{C} \text{ reg} \times K_j + \sum \text{C} \text{ ev.} \times K_m + \sum \text{C} \text{ c.fisc} \times K_n) \]

where:

\( \Delta V_f \) – increase in local budgets of revenue from the transition to a system of ad valorem property taxation;

\( \sum \text{C} \text{ cad} \times K_i, \sum \text{C} \text{ reg} \times K_j, \sum \text{C} \text{ ev.} \times K_m, \sum \text{C} \text{ c.fisc} \times K_n \) – accumulated cost for the execution of cadastral work, the registration of property objects, assessment and the creation of a fiscal cadastre, respectively;

\( K_i, K_j, K_m, K_n \) – accumulation factors for periods of time \( m, n, o, p \), during which the cadastre work is carried out, and also the registration, evaluation, creation of a fiscal cadastre, respectively.
Synergetic efficiency of the cadastre system

• During the period 2016 – 2018, effectiveness of the cadastre and the new system of taxation of residential property in the cities of Moldova accounted for 150%.

• During the same period, the effectiveness of the cadastre and the new system of taxation of industrial and commercial purposes objects was 125%.

Calculation model of the synergetic efficiency of the cadastre can serve as a basis to justify plans of work funding for property mass registration and valuation for taxation purposes.
The economic and social effects of the development of multipurpose cadastre

- **Social effects**: security for property rights, the development of a civilized market of real property and its infrastructure; the emergence of new professions, increases employment opportunities, increased confidence of taxpayers to the market value as a basis for property taxation

- **Economic effects**: broadening the tax base through the registration of all real property objects; improving the property management; reduction of the volume of transactions on the shadow market; raising local budgets revenue from taxes on real property from the market value of objects
Reform of central sectoral authorities in land administration

• The integrity of the land administration system has been affected as the state enterprise Cadastre was included into the new Agency for Public Services (which comprises all institutions providing registration services in respect of individuals, property, legal entities)
• Two other enterprises under the supervision of ARLC were transferred to the Agency for Public Property
• Some integral functions such as policy-making are planned to be transferred to different ministries (in the field of property valuation - to the Ministry of finance; in the field of cadastre, land relations and geodesy - to the Ministry of agriculture).
Current state of Moldova's land administration system

- Government
  - Agency for Public services
    - Registration of Population
    - Legal Entities Registration and Licensing
    - Vehicle Registration and Driver qualification
    - Registration of real property (Cadaster)
      - 39 territorial cadaster services
  - Agency for Public Property
    - Majority of state enterprises including
      - Territory Planning Institute
      - Soil Protection Institute
  - Agency for Land Relations and Cadaster
    - State Enterprise INGEOCAD

Policies in cadaster and real property valuation for taxation
Conclusions

1. A multi-purpose cadastre of real estate was established in the Republic of Moldova to present the data from legal, technical and economic perspective.

2. The cadastre’s integrated institutional structure has certain organizational, technological and economic advantages.

3. The property cadastre is generating certain social and economic effects inside the cadastral system (such as the institutional effect and the economic effect sufficiently high to ensure self-financing in the system) as well as certain external effects with a beneficial impact on the entire society and regional development in Moldova.

4. One of the challenges associated with the cadastre’s development is the lacking funding for the state programmes for registration and property tax valuation. As a consequence, no mass registration work has been performed since 2009. Property tax valuation progresses very slowly. The data on property values becomes obsolete, leading to lower tax basis reported and lower tax revenues to local governments.

5. The institutional reform of recent years has somewhat damaged the cadastre’s effectiveness.
Conclusions (2)

6. It is expected to continue the development of the cadastre in near future as follows:

A. A real property registration and valuation project with the WB funding was launched in January 2019, including:

- **Completing the work to perform primary mass registrations** of real property (2018-2023), which involves:
  - Identification and registration of approx. 410,000 agricultural land parcels and approx. 391,000 detached houses (manor houses) in rural areas;
  - Delimitation (establishment of the exact borders) of approx. 60,000 state-owned land parcels and approx. 235,000 land parcels owned by local governments (municipal administrations);

- **Completing the work to perform valuation of all real property units** in the following categories: dwelling houses in rural areas; agricultural land; property owned by central government and local governments, special purpose objects and unique real property;

- **Performance of** the revaluation of real property for tax purposes.
B. In addition to the efforts falling within the scope of the above project, work will be also continued in the following directions:

- **Re-engineering and roll-out of MOLDLIS information system for property registration and valuation.** This system is currently at the stage of testing and final adjustments;

- **Re-engineering and roll-out of ARIS information system for registration of addresses.** This system is currently also at the stage of testing and final adjustments;

- **Development and implementation of an information system for registration of engineering lines and technical infrastructure items.** Work has began to develop the system concept;

Research should be continued of the cadastre’s economic impact on the society and national economy.

We express our gratitude to the conference organisers and hosts for this possibility to disseminate information on best practices and to share our thoughts regarding this important matter.
Thank you