MINISTRY OF INDUSTRY AND AGRICULTURE

STATISTICS SYSTEM FOR AGRICULTURAL MECHANIZATION IN MONGOLIA
I. SYSTEM AND CURRENT STATUS OF AGRICULTURAL STATISTICS

I.1 Share of the agricultural industry in the economy of Mongolia (2013)

- **GDP**
  - Agricultural industry: 21.7%

- **Labour Force**
  - Agricultural industry: 33.5%

- **Export Income**
  - Agricultural industry: 12.5%
I.3 Crop sector of Mongolia (2013)

Total sown area - 315.3 thou. hectares

Wheat - 259.2 thou. hectares

Potatoes - 13.8 thou. hectares

Vegetables - 7.0 thou. hectares

Total sown area - 315.3 thou. hectares
1.2 Livestock sector of Mongolia (2013)
An annual livestock census has been conducted in the country since 1924. Crop sector development has started as nationwide only on second half of 20th century. From 1970 started crop sector sense in Mongolia.

However, crop and ag. machinery statistics are based on administrative reporting system whose reliability is questionable.

The Government expressed its desire to improve and strengthen its agricultural statistics service and adopt a programme which conforms to international standards.

The Government is widening the scope of current livestock census to that of an agricultural census.

FAO has been assisted NSO since 2009 in integrating the 2010 Population and Livestock Censuses to build a sound household frame for the agricultural census.

The censuses will be linked through a unique household identification number. This will avoid duplication of efforts.
I.4 System of the agricultural statistics

Livestock
- Monthly
- Quarterly
- Annually
/Livestock Census/

Crops
- Monthly
- Quarterly

Agricultural machinery
- Annually

Respondents (2010)

Households
- Livestock- 216.6 thous
- Crops- 25.0 thous

Establishments
- Livestock- 500
- Crops- 1200
1.5 *Current needs for the agricultural statistics*

- Generation of agricultural statistics at primary unit level;
- Establishment of a frame for sample surveys for the agricultural industry;
- Creation of a database which provides detailed and exhaustive data on the agriculture that are internationally comparable and meet user demands; and
- Development of additional indicators such as for Millennium Development Goals, food security, and agricultural services and creation of the possibility of making poverty analysis of them.
III.2 The Agricultural Census in Mongolia

- **Agricultural Census:**
  - Frequency and type:
    - Census every 10 years;
    - By-census every 5 years; and
    - Livestock and Domestic Animal Census every year.
  - Coverage:
    - The country as a whole
  - Enumeration unit:
    - Households and establishments engaged in agricultural activities
  - Activities to be covered:
    - Livestock, crop farming, fishery, forestry, and hunting
  - Ways to construct a frame for sample surveys:
    - Population and Housing Census
  - Methodology:
    - A combined instrument of the census and the sample survey
Grain Production Development, Direction

**Current extent**
- Distribution Field – 622.9 thousand hectare
- Crop – 475.9 thousand hectare
- Entity 39
- Entity 130
- Citizen Entity 115
- Citizen Entity 811

**Goal**
- Distribution Field – 765.0 thousand hectare
- Crop – 610.0 thousand hectare
- Adapt advanced technology for over 40%
- Include in renewal of High Performance technology
- Include in renewal of Medium performance technology
- Include and develop into a cooperative for technology renewal on a voluntary base

**Citizen – 431**
**Entity – 660**
**Total – 1091**

**Distribution Field – 622.9 thousand hectare**
- ≤ 500 hectare
- 501 – 999 hectare
- 1000 – 2999 hectare
- ≥ 3000 hectare
## Agricultural mechanization statistical data

<table>
<thead>
<tr>
<th>ДД</th>
<th>Technical name</th>
<th>Total</th>
<th>1-4r year</th>
<th>5-8 year</th>
<th>9-12 year</th>
<th>13-16 year</th>
<th>17-20 year</th>
<th>20-more year</th>
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<td>1</td>
<td>Tractors (100hp above)</td>
<td>1778</td>
<td>302</td>
<td>356</td>
<td>320</td>
<td>267</td>
<td>302</td>
<td>231</td>
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<td>2</td>
<td>Tillage machinery</td>
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<td>230</td>
<td>255</td>
<td>192</td>
<td>217</td>
<td>230</td>
<td>153</td>
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<tr>
<td>3</td>
<td>Seeder</td>
<td>2009</td>
<td>261</td>
<td>342</td>
<td>362</td>
<td>442</td>
<td>402</td>
<td>201</td>
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<tr>
<td>4</td>
<td>Sprayer</td>
<td>358</td>
<td>47</td>
<td>61</td>
<td>64</td>
<td>79</td>
<td>75</td>
<td>72</td>
</tr>
<tr>
<td>5</td>
<td>Sprayer(fertilizer)</td>
<td>34</td>
<td>4</td>
<td>7</td>
<td>6</td>
<td>7</td>
<td>6</td>
<td>3</td>
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<td>6</td>
<td>Ангилангийн жатка</td>
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<td>85</td>
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<td>119</td>
<td>136</td>
<td>91</td>
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<tr>
<td>7</td>
<td>Combine harvester</td>
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<td>158</td>
<td>180</td>
<td>203</td>
<td>248</td>
<td>192</td>
<td>147</td>
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<tr>
<td>8</td>
<td>Fodder combine</td>
<td>24</td>
<td>2</td>
<td>6</td>
<td>7</td>
<td>5</td>
<td>3</td>
<td></td>
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<tr>
<td></td>
<td><strong>Total</strong></td>
<td>7,175</td>
<td>1073</td>
<td>1292</td>
<td>1222</td>
<td>1383</td>
<td>1347</td>
<td>898</td>
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</tbody>
</table>
GRAIN PRODUCTION BY YEARS

Grain crop

Potato

Vegetable

### Farm mechanization and its future trend and goal

<table>
<thead>
<tr>
<th>Farm machinery</th>
<th>By 2013</th>
<th>Уүнээс</th>
<th>Renovation, planned %</th>
<th>2014-2018 онд хийх парк шинэчлэлт</th>
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</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Machinery in bad condition</td>
<td>In good condition</td>
<td>total</td>
</tr>
<tr>
<td><strong>Machinery in bad condition</strong></td>
<td></td>
<td></td>
<td></td>
<td>quantity</td>
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<tr>
<td>Tractor</td>
<td>1778</td>
<td>790</td>
<td>988</td>
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<td>Tillage machinery</td>
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<td>1,235</td>
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<td>Sprayer</td>
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<td>Fertilizer application equipment</td>
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<td>10</td>
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<td>41.0</td>
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<tr>
<td>Reaper</td>
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<td>372</td>
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<td>Corn harvester</td>
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<td>50</td>
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<tr>
<td>Fodder harvester</td>
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<td>6</td>
<td>18</td>
<td>55.0</td>
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<tr>
<td><strong>Total</strong></td>
<td>7,175</td>
<td>3,860</td>
<td>3,315</td>
<td>47.5</td>
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</table>
The Agricultural Census in Mongolia

- Indicators of the Agricultural Census
  - Core data items to be collected through Core Census Module:
    - Identification and location of agricultural holdings;
    - Legal status of agricultural holders;
    - Age and sex of agricultural holders and households members, household size;
    - Main purpose of production of holdings;
    - Area of holdings according to land use types;
    - Total area of holdings and land tenure types;
    - Presence of irrigation on holdings;
    - Types of temporary and permanent crops on holdings
    - Number of animals on holdings for each livestock type
    - Presence of forest land on holdings; and
    - Other economic production activities of holdings’ enterprise (fishery and hunting)
III.2 The Agricultural Census in Mongolia

- Indicators of the Agricultural Census
  - Thematic modules to be collected through Census Supplementary Modules:
    - Land (8 items)
    - Irrigation and water management (10 items)
    - Crops (12 items including farm machinery)
    - Livestock (8 items)
    - Agricultural services (4 items)
    - Agricultural practices (2 items)
    - Demographic and social characteristics (5 items)
    - Farm labour (10 items)
    - Household food security (11 items)
    - Forestry (6 items)
    - Management of the holdings (8 items)
Indicators required to prepare the sampling frame:
- Surname and firstname of a household head;
- National ID number;
- Total number of livestock;
- Number of household animals, by their types; and
- Sown area, by types of plants.

Activities undertaken:

1. Do your household have livestock and household animals?
   - Yes
   - No
2. Did your household sow crops in 2010?
   - Yes

Activities to be undertaken:

To link collected data with "Livestock Census":
- Name and code of baghs, soums, and aimags;
- Household number; and
- Register number of household heads.
   *within 1st quarter of 2011*

To prepare sampling frames for agricultural census and survey, by households:
   *within 2nd quarter of 2011*

To prepare sampling frames for agricultural census and survey, by enterprises:
   *within 2nd quarter of 2011*

Questions on agriculture included in the form for listing of the Population and Housing Census.

Form for listing of households engaged in agriculture and its manual prepared, tested and approved.

Listing of households engaged in agriculture done during the household listing of the Population and Housing Census. It verified and coded.
II. DIRECTIONS IN IMPROVEMENT OF AGRICULTURAL STATISTICS

II.1 Recommendations from UNFAO

- According to a World Programme for the Census of Agriculture 2010, countries are encouraged to conduct their agricultural censuses within the framework of the system of integrated agricultural censuses and surveys.

  Two elements in the system of integrated agricultural censuses and surveys. They are as follows:

  (1) **the agricultural census**: the nucleus of the system; and

  (2) **the programme of agricultural sample surveys** based on the agricultural census.

- A modular approach is recommended to those that wish to meet the need for a wider range of data from the agricultural census while minimizing the costs of the census-taking.
As the agricultural census taking is a resource-intensive exercise, the World Programme for the Census of Agriculture recommends that the agricultural census should be conducted in conjunction with or during other censuses and in the particular population and housing census.
II. DIRECTIONS IN IMPROVEMENT OF AGRICULTURAL STATISTICS

II.2 Strategy for improving the agricultural statistics of the country

- Study and employ new methods and techniques for collecting data and update the system of indicators

Conduct the agricultural census