

#### MINISTRY OF INDUSTRY AND AGRICULTURE

# MONGOLIAN AGRICULTURAL MECHANIZATION DEVELOPMENT



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### **COUNTRY PROFILE**

Geography: Northern Asia, between China

and Russia, landlocked

**Territory:** 1.566.500 sq. Km

**Population:** 2.754.685 (as of 2010)

Capital: Ulaanbaatar

**GDP:** \$8.506 billion

Per capita \$3,042 (as of 2011)

Terrain: vast semi desert and desert

plains, grassy steppe, mountains in west and

southwest; Gobi Desert in

south-central

Climate: continental (large daily and

seasonal temperature ranges:

lowest -40°C; highest 38°C)

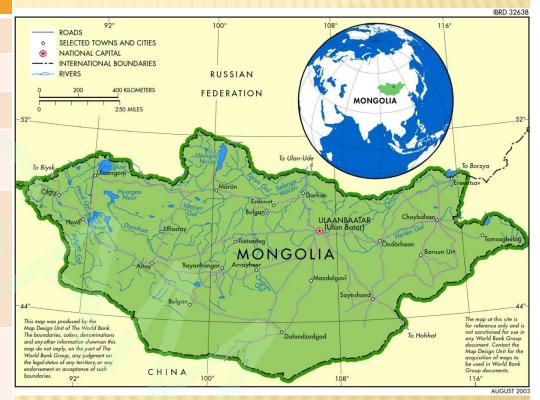
Precipitation: 200-350 mm in a year

Land use: arable land: 1%

permanent pastures: 80%

forests and woodland: 9%

other: 10%



## WEATHER CHARACTERISTICS

Season	Period	Temperature (°C)	Ave. Temp. (°C)
Spring	Apr.15~Jun.15	0 ~25	8 ~12
Summer	Jun.15~Aug.31	15 ~40	22 ~30
Autumn	Sep.1~Oct.15	10 ~0	4 ~6
Winter	Oct.15~Apr.15	<b>-9 ~-40</b>	-10 ~-20

## **ECONOMY**

- Mongolia's manufacturing sector of the economy are AGRICULTURE and MINING.
- Agriculture sector is an intensively growing main traditional economic sector.









## AGRICULTURAL SECTOR

- **\*** Agricultural sector produces 21.7% of total GDP.
- **×** 80% livestock and 20% crop sector.
- **\*** 40% of total working force is worked in agricultural sector.
- Main crops are wheat-100%, potato -100%, vegetables-60% / local market total consumption /
- **™** Meat, and dairy products -100%
- Total livestock at the end of 2012 has reached approximately 44 million herds.
- **\* Main agricultural export product: Leather, organic cashmere, meat, sheep and camel wool**

## AGRICULTURE PROFILE

**Crop production:** 

1% from the total territory;

15 % of total agriculture labor force

Cereals (wheat, rye and oats)

Potato, Vegetable, Fruit

> Cattle, Sheep, Goat, Camel, Horse

#### Agriculture:

20.6% of total GDP;

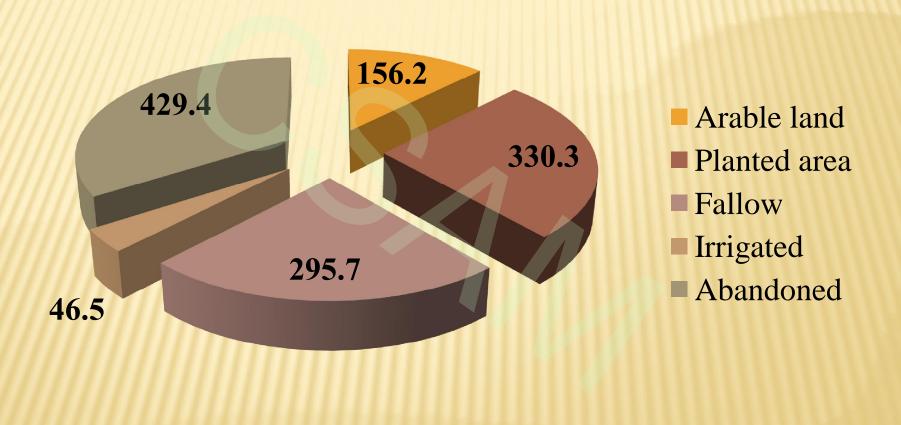
41% of labor force

#### Animal husbandry:

80% from the total territory;

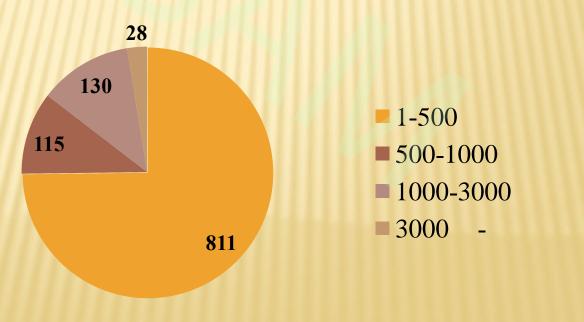
85 % of total agriculture labor force

## Land use for Crop production, (Total 1322,8 thous. ha)



## **CROP PRODUCTION ENTITIES**

Field	Number of entities	Land /ha/	
1-500 ha	811	127.856	
500-1000 ha	115	78.560	
1000-3000 ha	130	203.656	
3000 and more ha	28	122.457	
TOTAL (as of 2009)	1084	532.529	



## **AGRICULTURAL POLICY**

- The general agriculture policies are following:
  - + Self sufficiency of the stable crop production such as wheat, potato and main vegetable species
  - + Sustainable supply of safety food and ecologically pure crop production to the consumers
  - + Reduction of the poverty in rural area through income diversification due to engaging small vegetable and fruit farming.



#### POLICY FOR CROP PRODUCTION SECTOR

- > õGreen Revolutionö national programme /1998~2012/
- State policy toward food and agriculture /2003~/
- Third crop rehabilitation campaignö national programme for development of crop production /2008~2010/
- Seabuckthornö programme /2010~2016/

## GOVERNMENT SUBSIDIES IN CROP PRODUCTION SECTOR, 2009-2013

- o 50 % off from the price of new and advanced technique (tractors, combines)
- o Import and VAT tax free for new and advanced technique
- Loan for seed and fuel, fertilizer
- Financial incentives for wheat (appr. \$ 50-70 per tn) per year
- Final product purchase
- Construction and rehabilitation of Irrigation system (30% free)
- Construction of water reservoir and dams (free)
- Soil analysis of cropping area (579 300 ha)
- 50 % off for greenhouse
- Tools and seeds for vegetable and potato (free from charge)
- All type of short time trainings (free from charge)
- Agricultural Exhibitions and Field Demonstrations (no charge to participate and visit)

#### MAIN OUTCOMES IN CROP PRODUCTION SECTOR

#### Wheat supply

2007 - 27.5%

2011 - 105.6 %

#### Vegetable supply

2007 - 48.8%

2011 - 62.6%

#### **Arable land usage**

2007 – 260 800 ha

2012 - 672 500 ha

#### Potato supply

2007 - 88.7 %

2011 - 152.0 %

#### **Technical renovation**

2007 - 40 %

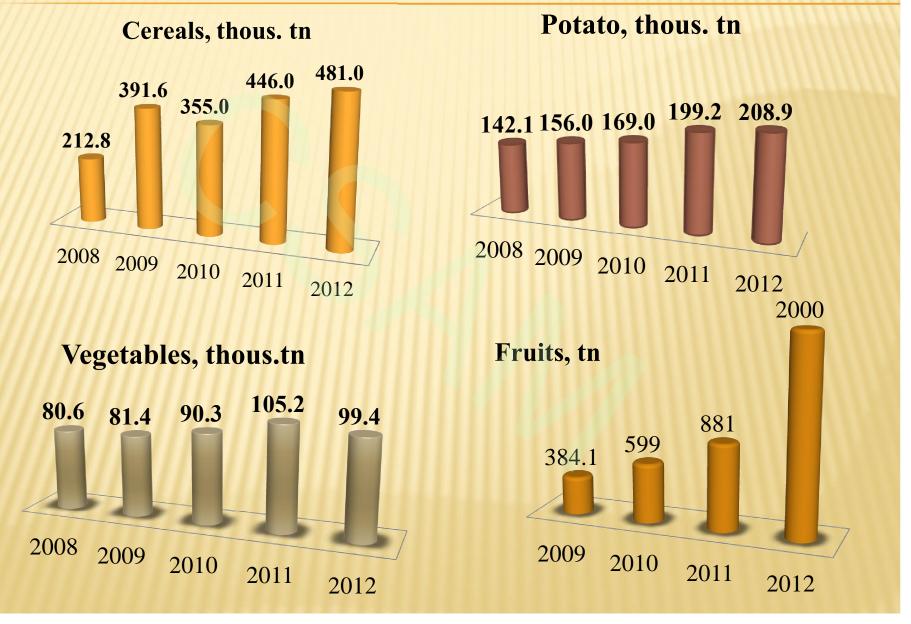
**2011 – 70 %** 

#### Irrigated area

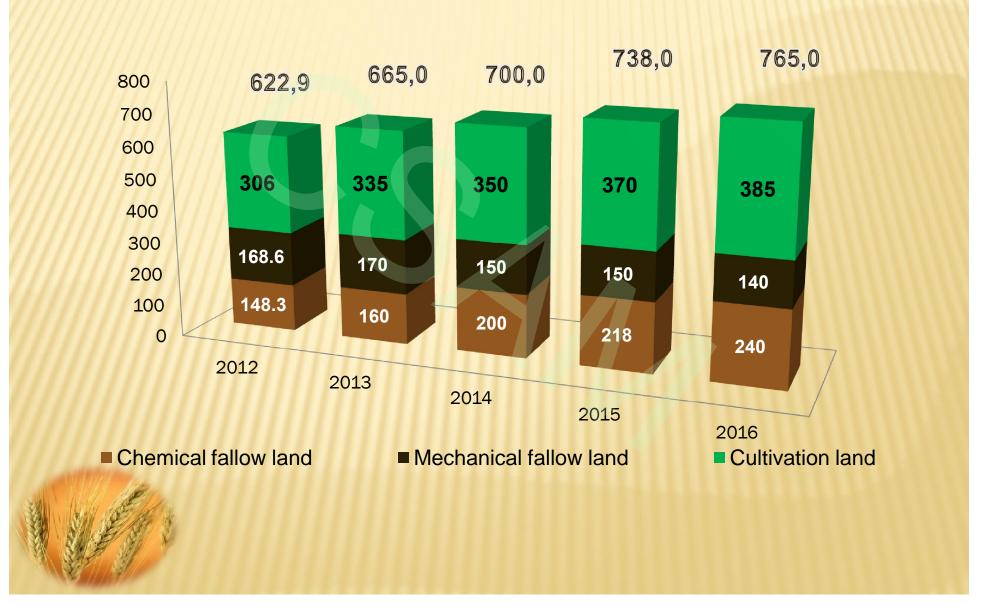
2007 - 20 350 ha

2011 – 46 548 ha

#### TOTAL HARVEST /2008-2012\* ESTIMATED/



#### **CURRENT CONDITION AND GOAL**



#### AGRICULTURAL MACHINERY





#### RESULTS



- Overall capacity of tractors and combines reduced planting time to 12-14 days and harvesting and cultivating fallow are in 35-38 days.
- \* The quality of fallow is improved and the productivity from each hector increased by 0,6 tn in the last 2 years.
- \* Transferred into no tillage technology from plowing technology. As a result, soil erosion decreased.
- Reduced operation costs



#### RESULTS



❖Improved soil moisture through making straw cover by using wheat combine and straw spreader at the same time.

- \*Opportunity is created to assist to small farmers without any techniques for running their businesses by installing public equipment. For example, public service units which provide technical services were established in 54 soums of 14 provinces.
- ❖Interest to invest in crop production sector is increased (food and flour processing etc)
- ❖ Advanced technologies are being transferred from World leading brands such as John Deere, Challenger, Sun Flower, Class, Morris and some companies opened their dealer companies.



#### **FUTURE OBJECTIVES**

- Technical renovation and advanced technology
- Develop irrigated agriculture
- Improve quality of seeds and its supply
- Increase the capacity of storing facilities and elevators
- Develop vegetable and fruit production
- Capacity building of the sector
- Attain self sufficiency with wheat, potatoes, vegetable and develop crop production for export purpose.
- Develop export oriented crop production

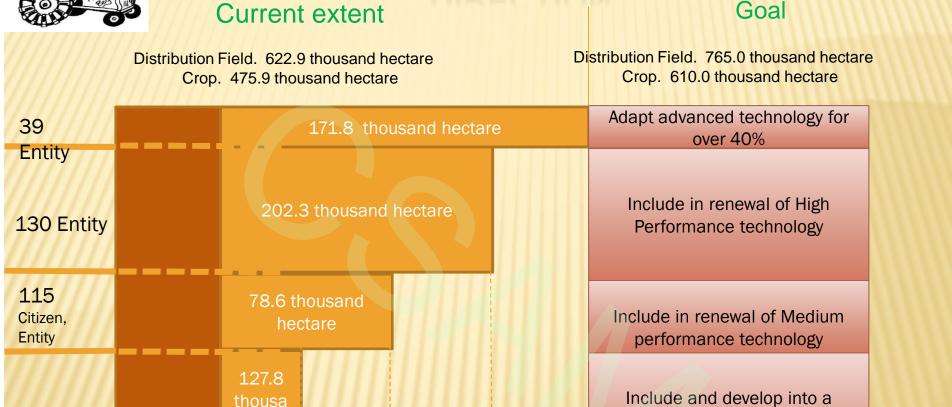


## **FUTURE OBJECTIVES**

- Improve the legal environment on crop land usage, ownership
- \* Improve the legal condition to protect cropping area and harvest from livestock, to set up border area for integrated crop and livestock production
- Create appropriate crop insurance system
- Increase crop production through investment from the profit of mining sector



## GRAIN PRODUCTION DEVELOPMENT, DIRECTION



Citizen-431 Entity-660 Total-1091

811

Citizen,

Entity

≤ 500 hec501 -999

hectare

1000-2999 hec. 3000 hec. ≤

hec.

cooperative for technology

renewal on a voluntary base

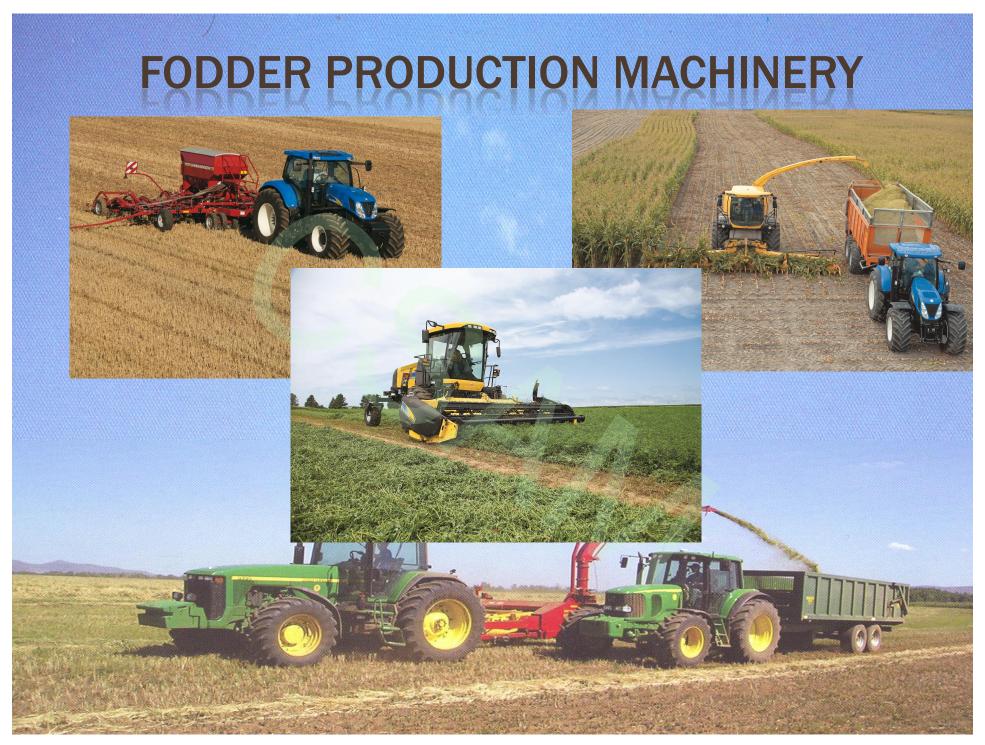
## **GRAIN PRODUCTION MACHINERY**











### Vegetable production



BASED ON THE "RECOMMENDED AMOUNT OF CONSUMPTION FOR A DAY FOR THE COMMONWEALTH" - PER PERSON SHOULD CONSUME 200 GRAM OF VEGETABLES A DAY.

- Current Supply- 52%.
- Mission: Supply 100% the domestic needs of vegetable by 2016.

/2012-2016 Government Action Plan, Article 6/



## MISSION TO INCREASE POTATO AND VEGETABLE PRODUCTION

Performance		2012		Results to Reach 2016	
		Potato	Vegetable	Potato	Vegetable
Population needs, thousand ton		134,7	165,7	140,4	173,2
Domestic Production	thousand ton	191,9	98,9	191,9	198,4
	percentage	142,7%	52%	136,6%	115%
Import, thousand ton	thousand ton	3,2	48,5	0	0
	percentage	2,3%	29,2%	0	0
Potato excess processing requirement, thousand ton		57,2	0	65,5	25,2
Current capacity of potato, vegetable processing industry, thousand ton		0	15,4	5,5	47,5

Mongolian population demands 165.0 thousands of tones potato, 187.6 thousands of tones vegetable in a year. Currently, we harvest more than 35.0 thousands of potato demands of a year.

#### **VEGETABLE AND POTATO PRODUCTION MACHINERY**









### ХЭРЭГЖҮҮЛЖ БУЙ АРГА ХЭМЖЭЭ







FOTON FT-250			
Capacity	25 hp		
Set	Plow		
Origin	China		

8400

Following summarizes the background, economic estimates and benefit of procurement of small scale tractors with match implements under soft loan from the Government of China.

## MECHANIZATION OF VEGETABLE PRODUCTION PROCESS



X нсний ногооны рл р-3,2 сая т г.



Роторт сийр л р 3,3 сая т г.

Хураагч 3,1 сая т г.

20 ХУВИЙН УРЬДЧИЛГАА ТӨЛБӨРТЭЙ ЗЭЭЛЭЭР ОЛГОЖ БАЙНА.



Т мсний рл р, ухагчийн иж б рдэл 5,0 сая



рсэлгээ суулгагч машин 7,4 сая т гр г

# MECHANIZATION OF POTATO PRODUCTION PROCESS



Planting Hilling Harvesting Sorting

#### **GREEN HOUSE MECHANIZATION**















рсэлгээ суулгагч







# THANK YOU FOR YOUR ATTENTION







Regional Forum 2013 (un-csam.org)