

中国农业机械化发展战略和支持政策

Development Strategy and Supporting Policy of Agricultural Mechanization in China



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CSAM



部门简介 Brief Introduction of department

- ◆ 农业部农业机械化管理局,负责起草农业机械化的发展战略、规划、计划、提出政策建议并指导实施等。
- ◆ Department of Agricultural Mechanization Management. Drafting the development strategy and planning, putting forward policy recommendations and guiding the implementations of agricultural mechanization.



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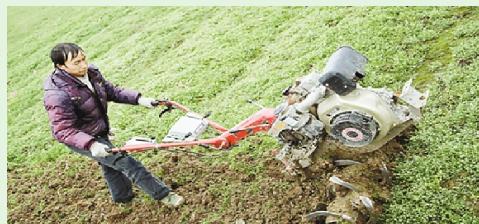
发展现状 Development Status



发展趋势 Development Situation



发展目标 and 战略重点 Development Goals and Strategic Priorities



1. 发展现状 Development Status

意义和措施 Meanings and measures

- ◆ 重要物质**技术基础** & 农业现代化的**重要标志**
Important technical basis for agricultural production & symbol of agricultural modernization;



◆ 系列支持促进农业机械化发展的政策举措：
《农业机械法》《国务院关于促进农业机械化和农机工业又好又快发展的意见》
《中国制造2025》

A series of policies and measures: “Agricultural Mechanization Promotion Law”, “Opinions of the State Council on promoting the sound and rapid development of agricultural mechanization and agricultural machinery industry” “Made in China 2025” etc.

1. 发展现状 Development Status



- ◆ 调动了广大农民购机、用机的积极性，推动了全国农业机械化持续快速发展，成为中国农业现代化发展进程中的突出亮点。

Aroused the enthusiasm of farmers to purchase and use machines, and promoted the sustained and rapid development of Agricultural Mechanization in China, and became the highlight of the development of China's agricultural modernization.

1. 发展现状 Development Status

各项政策的推动 & 农机作业旺盛需求
promotion of various policies and active demand of agricultural machinery

- ◆ 农机**装备总量**实现较快增长

The amount of agricultural machinery and equipment has increased rapidly



- ◆ 农业**机械化水平**取得长足进步

The level of agricultural mechanization has made great progress



- ◆ 从人畜力为主向机械化为主的**转变**

The power resource of agricultural production has been transformed from animal to machine

1. 发展现状 Development Status



- ◆ 稳定提升中国农业**综合生产能力**
Steady improvement of agricultural production capacity
- ◆ 加速农村一二三**产业融合**
Accelerate the integration of various industries in rural areas
- ◆ 促进农民**收入持续增长**
Promote the continuous growth of farmers' income



1. 发展现状 Development Status

成效 Improvement

◆ 农机**装备总量**迈上新台阶：

The total amount of agricultural machinery equipment has reached a new level:

- 2016年底全国农机总动力达到**9.7亿**千瓦，较2012年同口径增长了20%，预计今年将突破10亿千瓦；

By the end of 2016, the total power of agricultural machinery reached 970 million kilowatts, 20% higher than 2012 under the same caliber, and it is predicted to exceed 1 billion kilowatts this year;

- 农机科技创新取得积极进展，大马力、高效率、高性能和复式作业机具保有量快速增加。

With positive progress of technological innovation, the amount of high horsepower, high efficiency, high performance and multifunctional machines holdings is sharply increasing.

1. 发展现状 Development Status

成效 Improvement

◆ 农机**作业水平**实现新跨越:

The operation level of agricultural machinery has stridden forward:

- 2016年全国农作物耕种收综合机械化率达到**65.19%**，比2012年提高8个百分点，预计今年还将新增1个百分点以上；

In 2016, the comprehensive mechanization rate of crop cultivation reached 65.19%, 8 percentage points higher than that in 2012, and it is expected to increase by more than 1 percentage points this year;

- 小麦生产基本实现全程机械化，水稻、玉米生产机械化率超过80%，甘蔗、棉花、油菜等薄弱环节的机械化水平有了突破性进展。

Wheat production has basically achieved whole process mechanization, mechanization rate of rice and corn production is more than 80%, the level of mechanization on sugarcane, cotton and rape has made a breakthrough.

1. 发展现状 Development Status

成效 Improvement

◆ 农机**社会化服务**能力有了新提升:

Socialized service ability of agricultural machinery has improved:

- 以农机合作社为代表的新型农机服务组织不断涌现，2016年中国农机户和农机服务组织总数达到**4249万**个；

The emerging agricultural machinery service organizations represented by agricultural machinery cooperatives spring up. In 2016, the total number of agricultural machinery households and service organizations in China reached 42 million and 490 thousand;

- 涌现跨区作业、代耕代种、全程托管等多种形式的农业适度规模经营，2016年中国农机化服务总收入达到**5388亿**元。

Trans-regional operation, planting by substitutes, complete trusteeship and other agricultural service model constantly innovate, gross income of China's agricultural mechanization service reached 538 billion 800 million RMB in 2016, an increase of 12.7% compared to 2012.

2. 发展形势 Development Situation

- ◆ 中国已经进入传统农业向现代农业加快转变的关键时期，农业机械化发展的内外部环境正经历着历史性深刻演变。

China has entered a critical period of accelerating transition from traditional agriculture to modern agriculture. The internal and external environment for the development of agricultural mechanization is undergoing a profound historical evolution.

关键时期
critical period

前景广阔
broad prospect

- ◆ 机械化引领和主导农业生产方式变革的态势更趋显现，农业机械化发展前景**前景依然广阔**。

The trend of mechanization leading the change of agricultural production mode is more apparent, and the prospect of agricultural mechanization development is still broad.

2. 发展形势 Development Situation

广阔前景 Broad prospect

- ◆ 农业现代化进程中机械化的**推动作用**越来越明显：
The role of mechanization becomes more and more obvious in the process of agricultural modernization:
 - 影响着农业生产成本和农民种植意愿，影响着先进农业技术的标准化广泛应用；
An increasingly direct influence on the costs of agricultural production, farmers' willingness to plant, the standardization of advanced agricultural technology;
 - 影响着农业生产经营方式变革，影响着农业投入品减量化使用和废弃物资源化利用。
An increasingly direct influence on the reform in the way of agricultural production and management, reduction of agricultural inputs and waste recycling.

2. 发展形势 Development Situation

广阔前景 Broad prospect

◆ 农业生产对机械化的**需求**越来越迫切：

Demand for mechanization is becoming more and more urgent in agricultural production:

- 农村人口向非农产业转移、向城镇聚集态势明显，多种形式的适度规模经营步伐加快；

The transfer of rural population to non-agricultural industries and urban areas is obvious. The development of diversified moderate-scale management has been accelerated;

- 新型工业化、城镇化发展，实现农业标准化、规模化、专业化、组织化和社会化生产，破解成本地板和价格天花板双重挤压困局。
New-typed industrialization and urbanization, making agricultural production become standardized, large-scale, specialized, organized and socialized, cracking the dilemma that the oppression of high costs and low prices.

2. 发展形势 Development Situation

广阔前景 Broad prospect

- ◆ 农业机械化**发展环境**越来越有利：
The environment for the development of agricultural mechanization is increasingly favorable:
 - 《国民经济和社会发展规划纲要》要求加快推进农业机械化；
The Outline of the Thirteenth Five-Year Plan for National Economic and Social Development explicitly called for accelerating agricultural mechanization, agricultural equipment technology research and raising the level of agricultural intelligence and precision;
 - 《中国制造2025》促进农机工业技术创新和产品创新将日趋活跃。
Technology and product innovation of agricultural machinery industry become more and more active and the demand for new equipment will be expected to be met to a greater extent since Made in China 2025 has been launched.
 - 农业信息化成为助推农业机械化发展方式转变的革命性力量。
Agricultural informatization has become a revolutionary force to promote the transformation in development mode of agricultural mechanization.

2. 发展形势 Development Situation

不平衡 Unbalanced : "Three High and Three Low"

- ◆ 从**作物**上看，小麦水稻玉米三大主粮的综合机械化水平较高，棉油糖等经济作物的综合机械化水平较低。

For crop, the comprehensive mechanization level of the three staple(wheat, rice and maize) is relatively high while the counterpart of economic crops such as cotton, oil and sugar is low.



2. 发展形势 Development Situation

不平衡 Unbalanced : "Three High and Three Low"

- ◆ 从区域上看，北方旱地和平原地区的机械化水平较高，南方水田和丘陵山区的机械化水平较低。

For region, the mechanization level in the northern dry lands and plains is high while the southern paddy fields and hilly areas relatively low.



2. 发展形势 Development Situation

不平衡 Unbalanced : "Three High and Three Low"

- ◆ 从**产业**上看，种植业机械化水平较高，而畜牧业、渔业、农产品初加工、果菜茶、设施农业的机械化水平较低。

For industry, there are the higher level of mechanization in planting and lower level of mechanization in animal husbandry, fishery, preliminary working of agricultural products, fruit-vegetable-tea industry and facilities farming .



2. 发展形势 Development Situation

不充分 Inadequate : "Three More Than"

- ◆ 小马力、中低端机具多，大马力、高品质机具少。
Low-powered and backward machines are more than high-powered and high-quality equipments .



2. 发展形势 Development Situation

不充分 Inadequate : "Three More Than"

- ◆ 粗放型的单项农机作业多，精细型的复式农机作业少。
The machines that apply to only one operation are more than precision multiple machines.



2. 发展形势 Development Situation

不充分 Inadequate : "Three More Than"

- ◆ 小规模分散型自用型农机户较多，大规模专业化综合化农机服务组织较少。

There are many small-scale scattered farmers who use their machines only for themselves rather than large-scale specialized and integrated agricultural service organizations.



3. 目标和重点 Goals and Strategic Priorities

至2020

全国农业
机械化发
展第十三
个五年规
划

The 13th
five-year
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主要农作物生产全程机械化、种养加全面机械化取得显著进展

The production of main crop will be fully mechanized, the remarkable progress will be made in the comprehensive mechanization of farming, breeding and processing



区域协调共进的农业机械化发展新格局基本形成

The new pattern of the development for the agricultural mechanization in regional coordination will be basically formed



有条件的省份率先基本实现农业机械化

The provinces with qualified conditions will take the lead in basically realizing agricultural mechanization

By 2020

3. 目标和重点 Goals and Strategic Priorities

至2020

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By 2020



全国农作物耕种收综合机械化率达到70%

The comprehensive mechanization rate of tillage, planting, and harvesting will reach 70%



主要粮食作物基本实现生产全程机械化

The main grain crop will basically realize the fully mechanization for the whole process of the production



大宗经济作物生产全程机械化取得明显突破

There will be a clear breakthrough in the fully mechanization of the production of economic crops



农机社会化服务能力显著增强

The social service capacity of agricultural machinery will be significantly enhanced



建成500个全程机械化示范县

Form 500 demonstrated counties which are completely mechanized

3. 目标和重点 Goals and Strategic Priorities

至2025

全国农业
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展第十三
个五年规
划

The 13th
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全国农作物耕种收综合机械化率达到75%
The comprehensive mechanization rate of the
tillage, planting, and harvesting will reach 75%



农产品优势产区主要作物生产全程机械化
基本实现

The production of main crop will realize
comprehensive mechanization basically in
dominant growing areas



农业全面机械化取得显著进展

The comprehensive agricultural mechanization will
make significant progress

By 2025

3. 目标和重点 Goals and Strategic Priorities

- ◆ 适应新形势、把握新要求，我们将更好地满足广大农民群众对机械化生产的新需要为目标，加快推进农业机械化转型升级，为推进农业供给侧结构性改革、实施乡村振兴战略提供有力支撑。将重点实施七大行动计划。

To adapt to the new situation and grasp the new requirements, we will aim at better meeting the new needs of the majority of farmers in mechanized production, accelerate the transformation and upgrading of agricultural mechanization and provide strong support to push agricultural supply-side structural reform and implement the strategy of rural revitalization. We will focus on the following seven actions

3. 目标和重点 Goals and Strategic Priorities

一是农业机械化科技创新驱动计划

Action for driving technological innovation of agricultural mechanization

- ◆ 发布科技规划、制定公布需求目录、提出项目建议、建设科研基地、实施农机新产品补贴试点、组建科技创新联盟等工作，为农业机械化科技创新提供遵循和指导。
- ◆ Provide guidance for technological innovation of agricultural mechanization by publishing science and technology program, bringing out the list of requirements, putting forward project suggestions, establishing research bases, establishing and funding some pilots for use of emerging agricultural machinery, building technology innovation alliance, etc.

3. 目标和重点 Goals and Strategic Priorities

二是主要农作物生产全程机械化推进计划

Action for developing the whole process mechanization of main crops

- ◆ 创建500个全程机械化示范县为抓手，实施全程机械化关键环节机具购置敞开补贴，加大示范项目投入力度，强化绩效考核，推进有条件的地方整乡、整县、整省创建。
- ◆ Create 500 demonstration counties for whole process mechanization, provide sufficient subsidies for purchasing machines used for key link in whole process mechanization, enhance investment in demonstrated projects, strengthen the performance review and push the qualified areas to develop whole process mechanization in whole village, county, and province.

3. 目标和重点 Goals and Strategic Priorities

三是丘陵山区农业机械化发展跨越计划

Action for developing agricultural mechanization in hilly area

- ◆ 重点围绕改善农机应用条件、强化机具供给和活化作业服务机制，研究和创设支持政策措施，争取各级农田基本建设投资、科技计划项目和财政资金的支持。
- ◆ Focus on improving the application conditions of agricultural machinery, strengthen machine supply and activate service mechanism, create the supporting policies, strive for comprehensive support of investment in basic construction of farmland at all levels, scientific and technological projects and financial funds.

3. 目标和重点 Goals and Strategic Priorities

四是农业机械化技术推广能力提升计划

Action for improving ability to extension of agricultural mechanization technology

- ◆ 重点是推进推广机构公益化、推广主体多元化、推广重点全程化、推广领域全面化、推广技术集成化、推广服务多样化，转变推广方式、强化体系支撑、优化服务供给。
- ◆ The key point is to promote extension agency commonweal, extension subjects diversification, extension emphasis in each process, extension domain comprehensive, extension technology integration, extension service diversification, and transform extension methods, strengthen support system, optimize service supply.

3. 目标和重点 Goals and Strategic Priorities

五是新型农机经营和服务主体成长计划

Action for forming the new agricultural machinery operation and the service

- ◆ 重点是创建一批集农业生产与农机服务于一体的新型经营主体，大规模培训农机合作社理事长、农机手和维修工等农机实用人才。
- ◆ The key is to establish a batch of new business entities which integrate agricultural production and service, and to train practical talents in large-scale such as the directors for agricultural machinery cooperative, agricultural machinery drivers and maintenance workers.

3. 目标和重点 Goals and Strategic Priorities

六是农机作业保障条件增强计划

Action for guaranteeing operation conditions of agricultural machinery

- ◆ 重点是指导各地积极参与国家相关重大建设规划实施，改善农机作业条件，提升农机化公共管理和服务能力。
- ◆ The focus is guiding local governments to actively participate in the implementation of major national construction planning, improving operating conditions of agricultural machinery, and promoting public management and service ability of agricultural mechanization.

3. 目标和重点 Goals and Strategic Priorities

七是机械化信息化融合促进计划

Action for driving technological innovation of agricultural mechanization

- ◆ 重点是推进"互联网+"农业机械化，支持引导信息技术应用，建设服务平台，促进互联互通，推进信息化与农机装备、作业生产和管理服务深度融合。
- ◆ The key is to promote "Internet+" agricultural mechanization, support and guide the application of information technology, build the serving platform, facilitate the interconnection, promote deep integration of the informatization with agricultural equipment, operation and management service.

结论 Conclusions

- ◆ 中国农业机械化持续保持着较快的发展态势;中国农业机械化发展不平衡不充分的问题还比较突出;重点实施七大行动计划保障农业机械化发展2020年目标的实现。
- ◆ At first, agricultural mechanization in China continues to maintain a rapid development; Second, the imbalance and insufficiency in development of agricultural mechanization is still relatively prominent; Last, paying attention to the implementation of the “Seven Actions” to ensure the realization of the goal of Agricultural Mechanization Development in 2020.





Thank you

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