

农机行业发展现状与趋势

Development Status and Trend of Agricultural Machinery Industry in China

中国农业机械流通协会

2022年11月

China Agricultural Machinery Distribution Association

November 2022

01

农机产业链发展现状 Development Status of Agricultural Machinery Industry Chain

农机行业发展现状

Development Status of Agricultural Machinery Industry

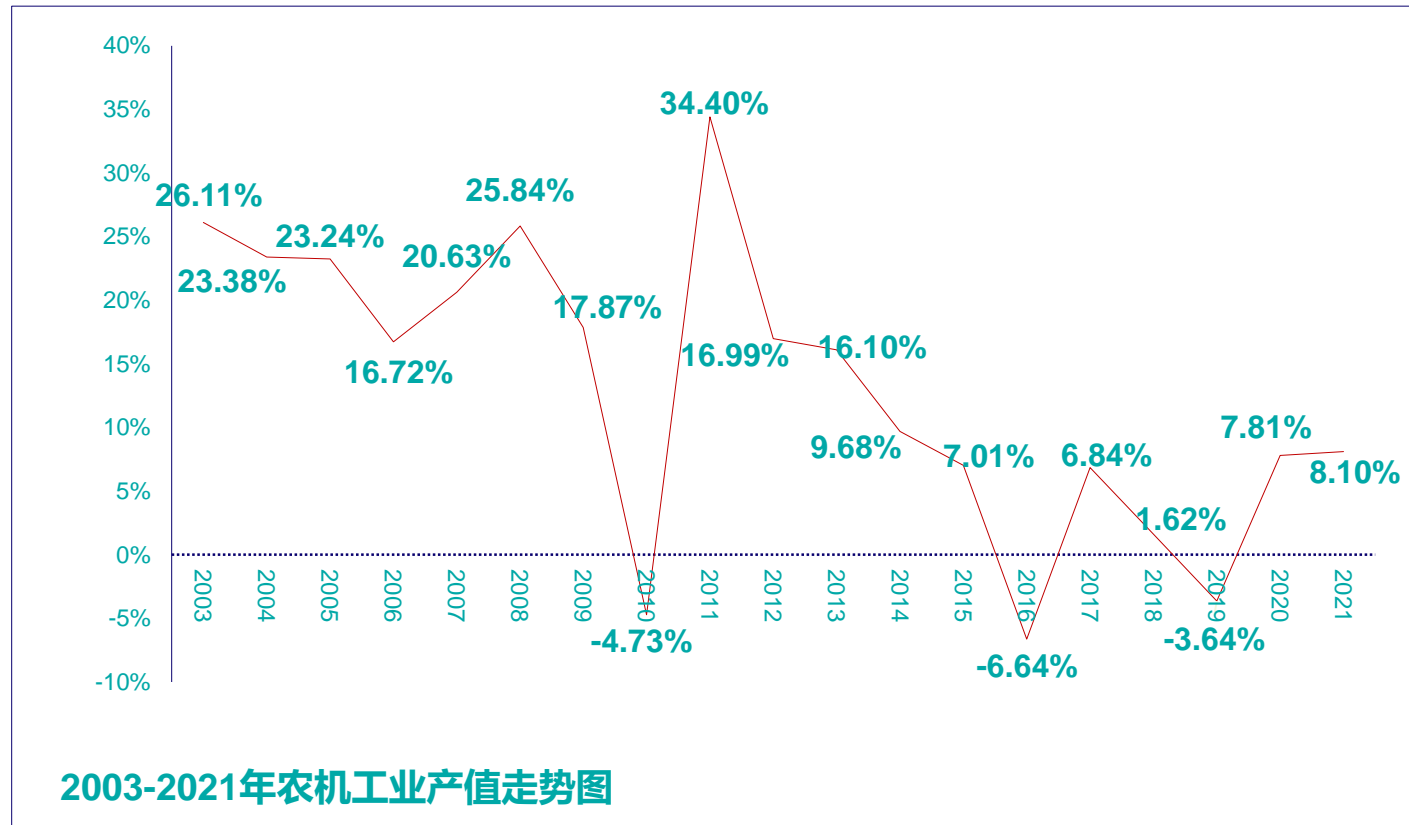


农机行业的黄金十年

The golden decade of the agricultural machinery industry

农机工业经过黄金10年，2014年转入个位数增长，市场进入波动期。

After 10 golden years' development, the agricultural machinery industry entered a single-digit growth in 2014, and the market entered a period of volatility.



Line chart of output value of agricultural machinery industry from 2003 to 2021

生产区域分布 Distribution of manufacture areas

农机生产区域主要分布在：山东、江苏、浙江、河南、河北

第一，山东，约占全国农机生产总值的30%左右；主要集中在潍坊、青岛、青州、淄博、济宁、泰安、德州、临沂等区域。其中潍坊有拖拉机城之称，企业数量占据全国拖拉机生产企业的50%以上，潍坊占山东的70%以上。潍柴雷沃、山东五征、泰安国泰等位居其中。

第二，江苏，约占全国农机生产总值的20%以上，主要集中在苏南的苏锡常，知名企业有常州的东风、常发、常柴、亚美柯等，无锡的洋马、博斯等，苏州的久保田、久富等。

第三，河南，约占全国农机生产总值的15%以上。洛阳成为拖拉机产业群，中国一拖是中国最大的拖拉机集团。

第四，浙江，约占全国农机生产总值的10%以上，主要集中在台州，有植保之乡之称；宁波是三大拖拉机集群之一。知名企业有：星光农机、浙江四方集团、星莱和等企业。

第五，河北，约占全国农机生产总值的10%以上。是中国最大的农机具生产群。譬如秸秆粉碎搜集机，一些主机生产企业，如农哈哈（中国最大播种机生产企业）、石家庄美迪、邯郸的英虎等都是全国知名的企业。

Agricultural machinery manufacture areas are mainly distributed in: Shandong, Jiangsu, Zhejiang, Henan, Hebei:

- 1. Shandong accounts for about 30%** of the country's total agricultural machinery production value, mainly located in Weifang, Qingdao, Qingzhou, Zibo, Jining, Tai'an, Dezhou, Linyi and other regions. Among them, Weifang is known as the city of tractors. The number of enterprises accounts for more than 50% of the national tractor manufacturers, and Weifang accounts for more than 70% of Shandong. Among them are Weichai Lovol, Shandong Wuzheng, and Taian Guotai.
- 2. Jiangsu, which accounts for more than 20%** of the country's total agricultural machinery production value, is mainly concentrated in Suxichang in southern Jiangsu. Well-known companies include Changzhou's Dongfeng, Changfa, Changchai, and Yameike, etc., and Wuxi's Yanmar and Bosch etc. Kubota and Jiufu in Suzhou.
- 3. Henan accounts for more than 15%** of the country's total agricultural machinery production value. Luoyang has become a tractor industry group, and China YTO is the largest tractor group in China.
- 4. Zhejiang, which accounts for more than 10%** of the country's total agricultural machinery production value, mainly located in Taizhou, known as the hometown of plant protection; Ningbo is one of the three major tractor clusters. Well-known enterprises include: Xingguang Agricultural Machinery, Zhejiang Sifang Group, Xinglaihe and other enterprises.
- 5. Hebei, which accounts for more than 10%** of the country's total agricultural machinery production value. It is the largest agricultural machinery production group in China. For example, straw crushing and collecting machines, some host manufacturers, such as Nonghaha (the largest seeder manufacturer in China), Shijiazhuang Meidi, Handan Yinghu, etc. are all well-known enterprises nationwide.

市场区域分布 Regional Distribution of the Market

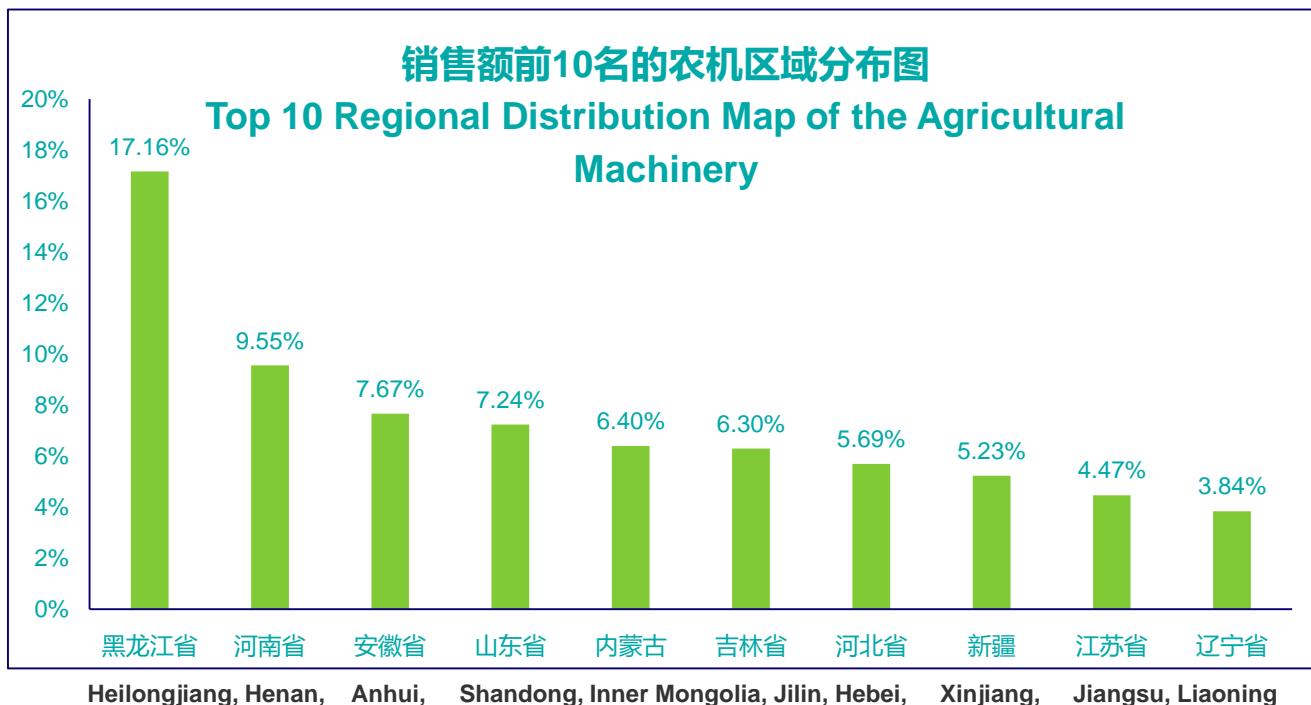
- ◆北部区域——三省一区；黑、吉、辽、内蒙
- ◆黄淮海区域——鲁、冀、豫、苏、皖等
- ◆西北区域——新疆、甘肃、山西、陕西、宁夏等
- ◆南方区域——“两湖”、“两广”、云贵川等
- ◆Northern region—three provinces and one district; Heilongjiang Province, Jilin Province, Liaoning Province, and Inner Mongolia Autonomous Region
- ◆Huanghuaihai area—Shandong Province, Hebei Province, Henan Province, Jiangsu Province, Anhui Province etc.
- ◆Northwest region—Xinjiang Autonomous Region, Gansu Province, Shanxi Province, Shaanxi Province, Ningxia Province etc.

形成这种区域格局的原因：

- 第一，粮食主产区、农业大省；
- 第二，耕地面积大、规模化作业水平高，利于大型机具作业，譬如拖拉机、粮食作物耕、种、收各个环节的机械；
- 第三，区域政策扶持力度大。

Reasons for this regional pattern:

1. Major grain producing areas and major agricultural provinces;
2. The large area of cultivated land and the high level of large-scale operations are conducive to the operation of large-scale machinery and tools, such as tractors, machinery for plowing, planting and harvesting of food crops;
3. Supportive policies for regional development.



农机行业发展现状

Development Status of Agricultural Machinery Industry



农机流通 Agricultural Machinery Distribution

农机经销商数量众多，全国规模经销商2万家左右，集中度偏低，市场销售额占比呈现两端小中间大的“橄榄型”结构。如果把经销商按照年度销售额分为大型（5000万以上）、中型（500万-5000万）、小型（500万以下），基于2019年农机补贴的经销商家数以及补贴带动的销售额分析，其销售额的“橄榄型”竞争格局特征较为突出。

- ◆年销售额5000万以上的经销商100余家，家数占比仅0.77%；实现销售额151.74亿元，占比19.33%。
- ◆年销售额500万-5000万的经销商3400余家，家数占比不过17.47%；实现销售额462.59亿元，占比却高达58.93%。
- ◆年销售额500万以下的小型经销商有15600余家，家数占比高达81.76%；实现销售额170.65亿元，占比不过21.74%。

竞争激烈，发展困难重重。首先，竞争激烈，洗牌加速。预计未来几年，将有50%的经销商退出市场竞争；其次，农机流通人才青黄不接；第三，多重挤压。上游受制造业的挤压，下游受垫补的挤压。

战略突围在路上。第一，跨行业扩张；第二，渠道下沉；第三，模式创新探索；第四，由实体扩张向资本运营转变，向控股、并购和整体收购转移等。

There are a large number of agricultural machinery dealers, about 20,000 dealers nationwide, with a low concentration, and the proportion of market sales presents an "olive-shaped" structure with small ends and a large middle. If the dealers are divided into large (above 50 million), medium (5 million-50 million), and small (less than 5 million) according to the annual sales, based on the number of dealers subsidized by agricultural machinery in 2019 and the sales analysis driven by subsidies, The characteristics of the "olive-shaped" competition pattern of its sales are more prominent.

- ◆There are more than 100 dealers with annual sales of more than 50 million yuan, accounting for only 0.77% of the total; the sales volume is 15.174 billion yuan, accounting for 19.33%.
- ◆There are more than 3,400 dealers with annual sales of 5 million to 50 million, accounting for only 17.47%; achieving sales of 46.259 billion yuan, accounting for as high as 58.93%.
- ◆There are more than 15,600 small dealers with annual sales of less than 5 million, accounting for 81.76% of the total; sales of 17.065 billion yuan, accounting for only 21.74%.

Competition is fierce and development is difficult. First of all, the competition is fierce and the reshuffle is accelerated. It is estimated that in the next few years, 50% of dealers will withdraw from the market competition; secondly, there will be a shortage of agricultural machinery circulation talents; thirdly, multiple squeezes. The upstream is squeezed by the manufacturing industry, and the downstream is squeezed by padding.

A strategic breakout is on the way. First, cross-industry expansion; second, channel sinking; third, model innovation exploration; fourth, transformation from entity expansion to capital operation, transfer to holding, mergers and acquisitions, and overall acquisitions.

农机行业发展现状

Development Status of Agricultural Machinery Industry



1 中国农民组织结构未来发展的四个方向

Four Directions for the Future Development of Chinese Farmers' Organizational Structure

以合作社为组织形式、以适度规模化种植为主业的职业化农民
Professional farmers organized in the form of cooperatives and mainly engaged in moderate-scale planting

以个体或劳务公司为组织形式、以提供劳动力输出为主业的农业工人
Agricultural workers who are organized as individuals or labor service companies and whose main business is to provide labor output



以个体或小型贸易公司为组织形式，以农产品、半成品购销为主业的商贩
Vendors organized in the form of individuals or small trading companies, mainly engaged in the purchase and sale of agricultural products and semi-finished products

以“温氏”模式为代表的组织形式，以养殖业为主业的合伙人
The organization form represented by the "Wen's" model, the partner whose main business is the breeding industry

2 目标客户发展趋势分析

Analysis of the Development Trend of Target Customers

未来5年，农机消费群体将发生两大变化：

第一，群体消费逐渐成为主流模式。随着土地流转面积的不断扩大，随着农业、农机合作社、家庭农场、农机大户、农服组织、种植养殖专业户、粮食运营者等组织的快速崛起，农机消费群体正出现颠覆性变化。在被调查的500余家渠道商中，仅仅18.5%的经销商选择了一般个体，选择群体购买的占81.5%。

第二，消费行为随农业和农机经营收入的变化而变化，突出表现在价格敏感度方面。如在收益下降、粮价下行的情势下，价格依然是竞争的重要手段。

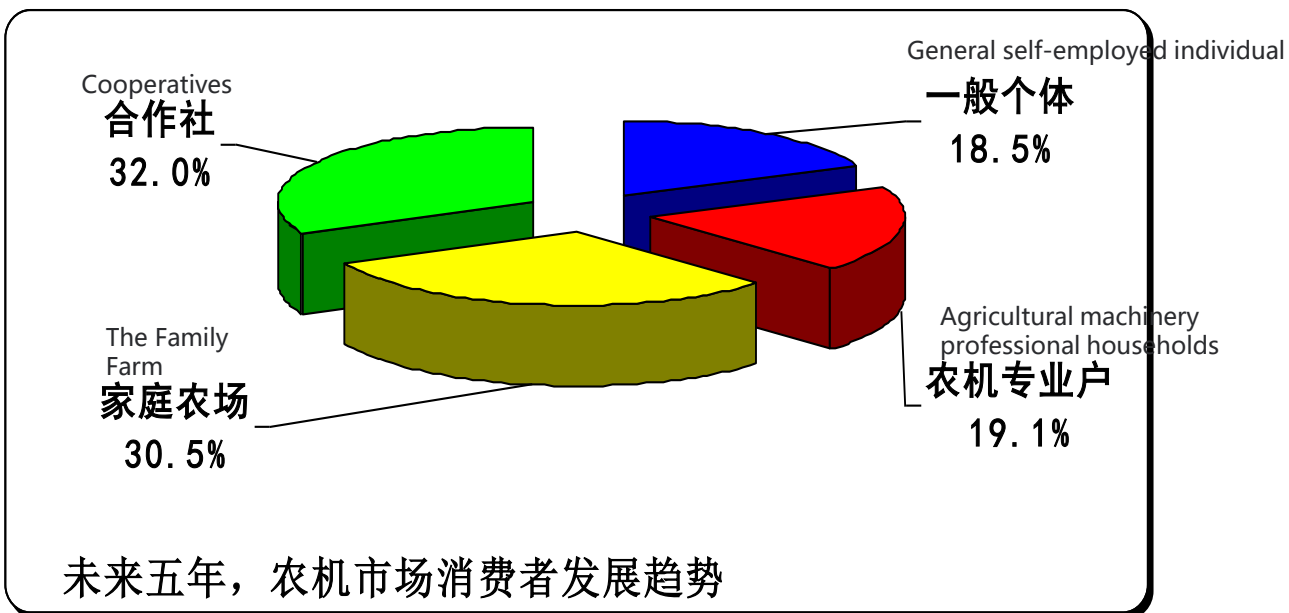
the next five years, there will be two major changes in agricultural machinery consumer groups:

First, group consumption has gradually become the mainstream model. With the continuous expansion of the area of land transfer and the rapid rise of organizations such as agriculture, agricultural machinery cooperatives, family farms, large agricultural machinery households, agricultural service organizations, professional planting and breeding households, and grain operators, agricultural machinery consumer groups are undergoing subversive changes. Among the more than 500 distributors surveyed, only 18.5% of the distributors chose general individuals, and 81.5% chose group purchases.

Second, consumption behavior changes with changes in agricultural and agricultural machinery operating income, especially in terms of price sensitivity. For example, in the situation of declining income and falling food prices, price is still an important means of competition.

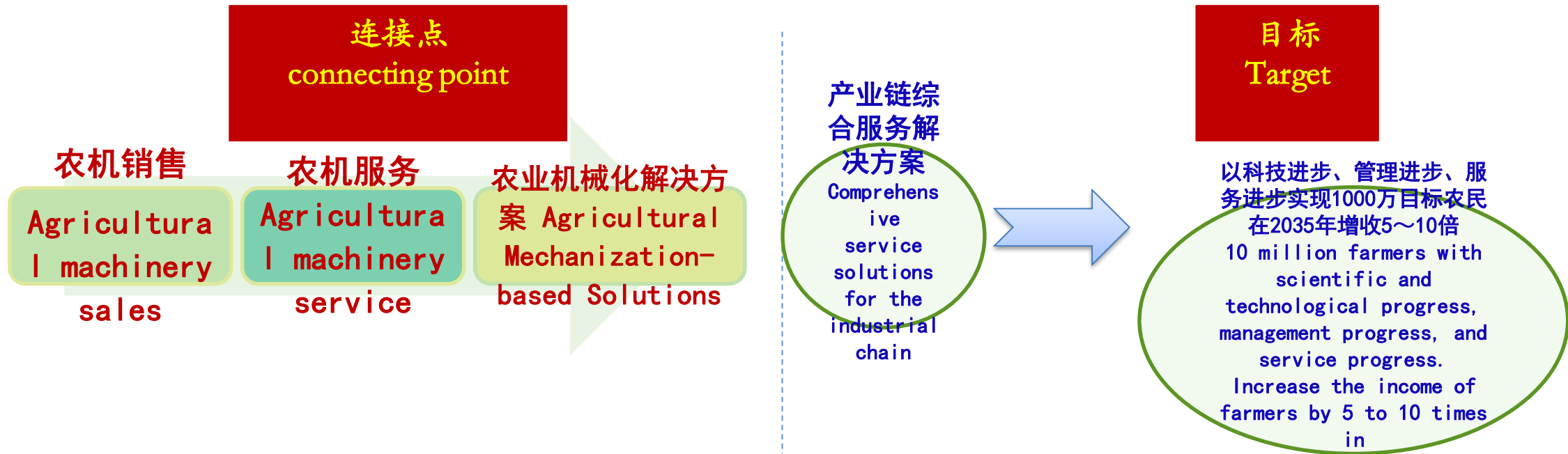
建议：重新定义终端客户，加大终端培育力度，将重点瞄准合作社、家庭农场、农机专业户等群体组织，保持经常性联系与沟通，从中了解用户需求，不断调整产品组合，扩大品牌终端影响力。

Suggestion: redefine terminal customers, increase terminal cultivation efforts, focus on cooperatives, family farms, agricultural machinery professional households and other group organizations, maintain regular contact and communication, understand user needs from them, constantly adjust product portfolio, and expand brand terminal influence.



Agricultural machinery market consumer development trend in the next five years

3 目标客户演变分析 Analysis of the Evolution of Target customers



1000万目标农民：收入由1500亿增长至7500亿~15000亿
10 million target farmers : income increased from 150 billion to 750 billion to 1.5 trillion

02

发展趋势 Development Trend

六大趋势 Six Trends

01

哑铃型需求
Dumbbell Requirements

02

需求碎片化
Demand Fragmentation

03

动能转换
Kinetic Energy Conversion

04

高端智能化
High-end Intelligence

05

风口与蓝海
Opportunities

06

权力转移
Transfer of Power

1 哑铃型需求 Dumbbell Requirements

随着我国农机化快速推进，农机工业制造水平的提升。农机产品快速迭代，市场需求呈现出两端凸起，中间塌陷的特点。

With the rapid advancement of agricultural mechanization in my country, the manufacturing level of agricultural machinery industry has improved. With the rapid iteration of agricultural machinery products, the market demand presents the characteristics of protruding at both ends and collapsing in the middle.

大型化趋势。 The Upsizing Trend.

- ① 土地流转和托管，农业经营规模逐渐扩大。
- ② 农机服务组织、农业（农机）合作社、家庭农场等新型主体快速发展，农户为提高作业效率和作业质量，大型农机成为其首选。
- ③ 保护性耕作助推大型耕作机具市场快速增长，大型作业机具带动大型拖拉机的快速发展。
- ④ 补贴政策促进。按照马力段、喂入量补贴的补贴政策促进用户选择购买大型机具。

① Land transfer and trusteeship, and the scale of agricultural operations gradually expanded.

② The rapid development of new entities such as agricultural machinery service organizations, agricultural (agricultural machinery) cooperatives, and family farms. In order to improve operation efficiency and quality, farmers have become their first choice for large-scale agricultural machinery.

③ Conservation tillage boosts the rapid growth of the large tillage equipment market, and large operating equipment drives the rapid development of large tractors.

④ Promotion of subsidy policies. According to the subsidy policy of horsepower segment and feed amount subsidy, users are encouraged to choose to purchase large machines.

小型化趋势。 The trend of miniaturization.

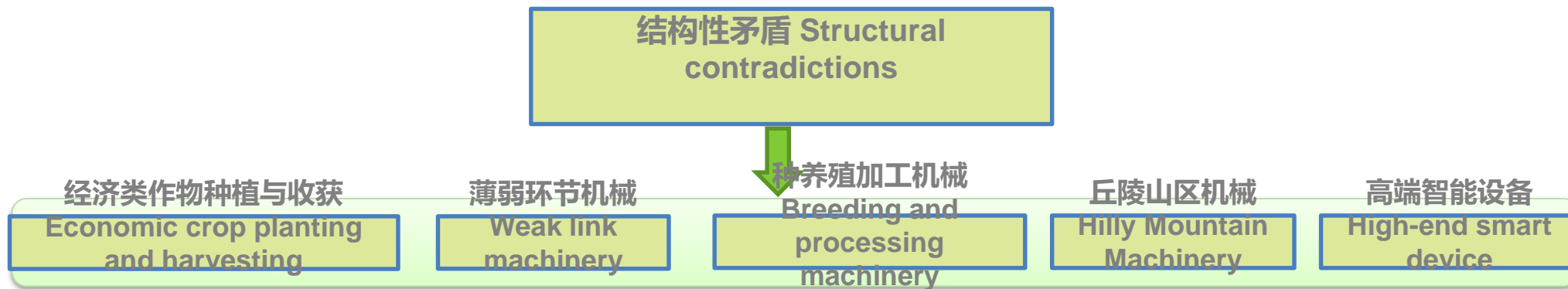
小型化是有我国特殊的自然环境决定的，大型化主要发生在平原或大地块的规模种植区域，而小型化在发生在丘陵山区。在平原区域基本实现机械化的形势下，不少丘陵山区依然停留在人工作业为主的时代，推动丘陵山区机械化是我国农机化发展发展的重点，也是国家政策扶持的重点，也就决定了适合丘陵山区的小型机械将成为未来几年发展的一个重要趋势。

Miniaturization is determined by our country's special natural environment. Large-scale planting mainly occurs in plains or large-scale planting areas, while miniaturization occurs in hilly and mountainous areas. Under the situation that mechanization is basically realized in plain areas, many hilly and mountainous areas still remain in the era of manual operations. Promoting the mechanization of hilly and mountainous areas is the focus of the development and development of agricultural mechanization in my country, and it is also the focus of national policy support, which determines the suitable small machinery in hilly and mountainous areas will become an important trend in the next few years.

2020年底，全国各类社会化服务主体超过90万个，服务面积超过16亿亩次，其中服务粮食作物超过9亿亩次，服务带动小农户超过7000万户。农业社会化服务的长足发展，为农业农村经济注入了新的活力，成为深化农村改革、推进农业现代化的突出亮点。

By the end of 2020, there will be more than 900,000 socialized service entities across the country, serving an area of more than 1.6 billion mu, of which more than 900 million mu of food crops will be served, and services will drive more than 70 million small farmers. The rapid development of agricultural social services has injected new vitality into the agricultural and rural economy and has become a prominent example in deepening rural reform and promoting agricultural modernization.

2 需求碎片化 Demand Fragmentation



粮食作物向经济类作物机械化拓展；食作物耕种收环节向全程机械化推进；种植业机械化向畜牧养殖业、水产养殖业、设施农业、农产品初加工业机械化延伸；平原地区机械化向丘陵山区机械化进军；中低端农机低质量作业向大型、高端、智能农机的高质量作业转变。

The mechanization of food crops is expanded to economic crops; the cultivation and harvesting of food crops is promoted to the whole process of mechanization; the mechanization of planting industry is extended to the mechanization of animal husbandry, aquaculture, facility agriculture, and primary processing of agricultural products; the mechanization of plain areas is advancing to the mechanization of hilly and mountainous areas; The low-quality operation of low-end agricultural machinery has changed to the high-quality operation of large-scale, high-end, and intelligent agricultural machinery.

小众市场
Niche market
需求碎片化
Demand fragmentation

生产企业对策：
第一，大型企业向高附加值的高端智能机械发展。第二，小型企业寻求适合自己的小众产品，走“三专”路线。

经销商对策：
第一，做好高中低档产品的组合。第二，由大众产品市场向小众产品市场的转移。第三，完成商业和盈利模式的创新。实现由卖产品到卖服务进而提供解决方案转移

Production enterprise countermeasures:
First, large enterprises are developing towards high-end intelligent machinery with high added value. Second, small businesses seek niche products that suit them and take the "three specialties" route.

Dealer countermeasures:
First, do a good job in the combination of high, medium and low-end products. Second, the shift from the mass product market to the niche product market. Third, complete the innovation of business and profit models. Realize the transition from selling products to selling services and then providing solutions.

3 商业模式变革加速 Business Model Change Accelerated

环境

Surroundings

从行业维度的拆分看，过去10年农机制造业的放缓主要来自于传统低端制造业，譬如产能过剩的拖拉机、粮食作物收获机、播种机等传统大众制造领域。而高技术制造业则保持着较快增长，譬如以无人驾驶飞行植保机、智能导航、畜牧业以及经济类作物的种植与收获机械。From the industry perspective, the slowdown of agricultural machinery manufacturing in the past 10 years mainly comes from traditional low-end manufacturing, such as tractors, grain crop harvesters, seeders and other traditional mass manufacturing fields with overcapacity. The high-tech manufacturing industry has maintained rapid growth, such as unmanned flying plant protection aircraft, intelligent navigation, animal husbandry, and economic crop planting and harvesting machinery.

从经济发展规律和政策方向上看，新能源、绿色环保和数字农机具备长期发展逻辑。From the perspective of economic development law and policy direction, new energy, green environmental protection and digital agricultural machinery have long-term development logic.

从结构上看，一些传统制造业继续向下的空间已经不大，而新兴产业及其对于新材料的需求正保持着高速增长，农机制造业有望在转型升级的过程中实现比重的基本稳定。农机市场的变轨，意味着市场动能的转换。同时要求企业顺势而为，跟上农机市场重构的脚步。From a structural point of view, there is not much room for some traditional manufacturing industries to continue to decline, while emerging industries and their demand for new materials are maintaining rapid growth, and the agricultural machinery manufacturing industry is expected to achieve basic stability in the process of transformation and upgrading. The change in the agricultural machinery market means the transformation of market momentum. At the same time, enterprises are required to follow the trend and keep pace with the restructuring of the agricultural machinery market.

结果 Result

由增量市场进入存量市场，动能转换，市场重构，发展方向调整 From the incremental market to the stock market, kinetic energy conversion, market restructuring, and development direction adjustment

模式变革

Model change

由规模速度型加速向效益型转变。经销商由原来的卖农机向卖服务向提供解决方案转型；生产企业与农业深度融合；大型企业的多元化与小型企业的专业化趋势更加突出。Accelerate the transformation from scale speed type to benefit type. Dealers are transforming from selling agricultural machinery to selling services to providing solutions; production enterprises are deeply integrated with agriculture; the diversification of large enterprises and the specialization trend of small enterprises are more prominent.

4 高端智能化 High-end Intelligence

我国农机市场正迎来一个崭新的时代—大型高端时代，高端、智能农机是高地、是趋势、是未来、是中国农机企业必争之战略要地。

Our country's agricultural machinery market is ushering in a new era—the era of large-scale high-end, high-end, intelligent agricultural machinery is the highland, the trend, the future, and the strategic location that Chinese agricultural machinery enterprises must contend for.



5 “风口”与蓝海 Opportunities

第一，经济类作物，包括油类、糖类作物机械；

第二，畜牧、水产养殖类机械；

第三，果蔬、茶叶类生产环节机械；

第四，设施农业机械；

第五，农产品加工类机械。

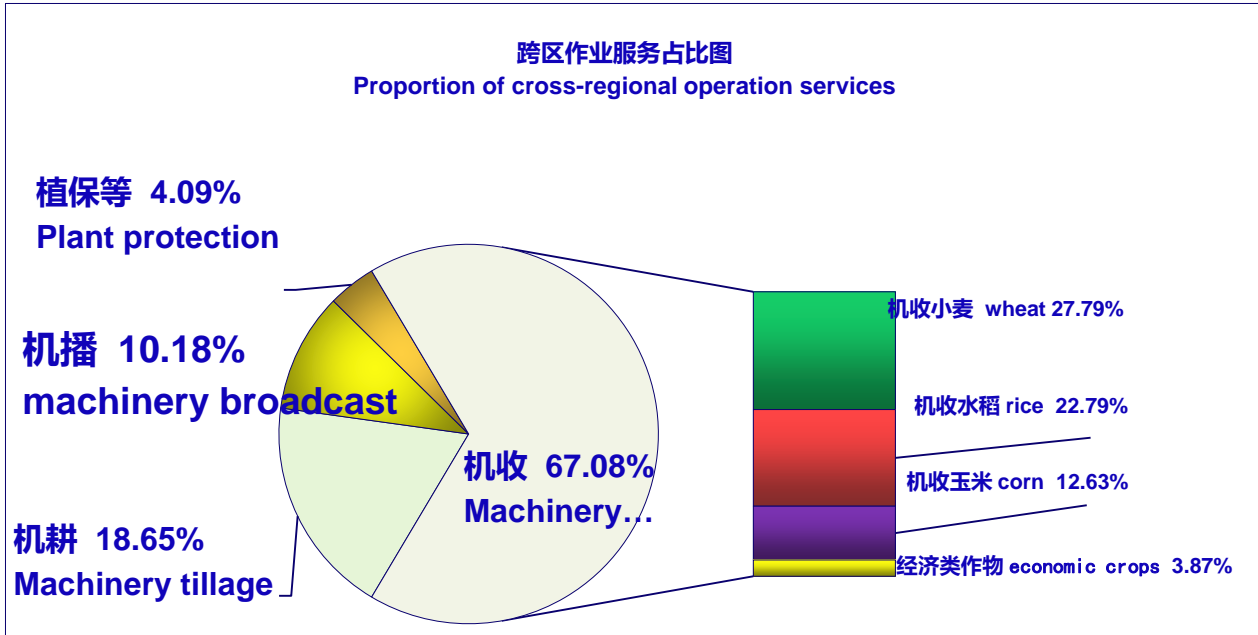
First, economic crops, including oil and sugar crop machinery ;

Second, animal husbandry and aquaculture machinery ;

Third, machinery for the production of fruits, vegetables, and tea ;

Fourth, facility agricultural machinery;

Fifth, agricultural product processing machinery.



2021年农机化水平短板 Weaknesses of agricultural mechanization in 2021	
项目/Item	机械化率 %/Mechanization rate %
耕种收综合机械化率 Comprehensive mechanization rate of tillage and harvest	72.03
机耕率 mechanical tillage rate	86.42
机播率 machine broadcast rate	60.22
机收率 machine harvest yield rate	64.66
油菜：耕种收综合机械化率 Rapeseed: comprehensive mechanization rate of tillage and harvest	61.92
机耕率 mechanical tillage rate	87.46
机播率 machine broadcast rate	38.81
机收率 machine harvest yield rate	50.97
马铃薯：耕种收综合机械化率 Potato: comprehensive mechanization rate of tillage and harvest	50.76
机播率 machine broadcast rate	29.77
机收率 machine harvest yield rate	31.16
花生：耕种收综合机械化率 Peanut: comprehensive mechanization rate of tillage and harvest	65.65
机播率 machine broadcast rate	58.65
机收率 machine harvest yield rate	50.90
棉花：耕种收综合机械化率 Cotton: comprehensive mechanization rate of planting and harvesting	87.25
机收率 machine harvest yield rate	68.02
设施农业 facility agriculture	42.05
农产品初加工 primary processing of agricultural products	41.64
畜牧养殖 livestock breeding	38.50
水产养殖 aquaculture breeding	33.50
水果生产 fruit production	25.88
茶叶生产 tea production	30.70

6 权力转移 Transfer of Power

在市场由卖方市场向买方市场转移的过程中，交易关系发生逆转，买方已经由原来被动接收卖方提供的产品与服务，转变为在交易过程中占据主导地位，甚至逐渐地替代供应商而掌控整个交易过程。这种市场结构的动态变化，对市场权力主体的替换及权力转移产生了重大影响。

市场营销学专家唐·E·舒尔茨曾刻画市场权力的对角线转移趋势，即随着市场的发展，交易的控制权呈现“**制造商—中间商—消费者**”的对角线转移状，**市场权力最终由消费者控制的演变过程**。卖方市场结构到买方市场结构的转变，是导致农机市场权力对角线转移的内在原因。迅猛发展的信息技术催化了这一过程的转变。不断变化的企业营销逻辑或商业运行模式体现了市场权力转移的基本要求。

从以企业为中心到以消费者为中心；从以封闭式单向灌输变为开放式双向互动；从以“品牌—顾客”关系为核心的单一映射变为“品牌—顾客—第三方”多元生态社群。所有身处互联网时代的农机企业都必须承认如上事实，并据此重塑企业的品牌价值观。

美国企业公共关系专家**加瑞特**：无论大小企业都必须永远按下述信念来计划自己的方向，企业要为消费者所有，为消费者所治，为消费者所享。

In the process of the market shifting from the seller's market to the buyer's market, the transaction relationship has reversed. The buyer has changed from passively receiving the products and services provided by the seller to occupying a dominant position in the transaction process, and even gradually replacing the supplier to control the entire process. This dynamic change in the market structure has had a major impact on the replacement and transfer of power subjects in the market.

Marketing expert Don E. **Schultz** once described the trend of diagonal transfer of market power, that is, with the development of the market, the control power of transactions presents a diagonal transfer of "**manufacturer-middleman-consumer**". , **the evolution process in which market power is ultimately controlled by consumers** . The change from the seller's market structure to the buyer's market structure is the internal reason leading to the diagonal shift of power in the agricultural machinery market. The rapid development of information technology has catalyzed the transformation of this process. The ever-changing corporate marketing logic or business operation model reflects the basic requirements of market power transfer.

From enterprise-centered to consumer-centered; from closed one-way indoctrination to open two-way interaction; from single mapping centered on "brand-customer" relationship to multiple "brand-customer-third party" ecological community. All agricultural machinery companies in the Internet age must acknowledge the above facts and reshape their brand values accordingly.

Garrett , an American corporate public relations expert : No matter how big or small a company must always plan its direction according to the following beliefs, the company must be owned by consumers, ruled by consumers, and enjoyed by consumers.

谢谢 THANKS

姓名/Name: 张华光 Zhang Huaguang

电话/Phone: 1352 2626 053

邮箱/Email: 2009guang_zh@163.com