

Food Security Challenges and Building Resilient Food Systems in China

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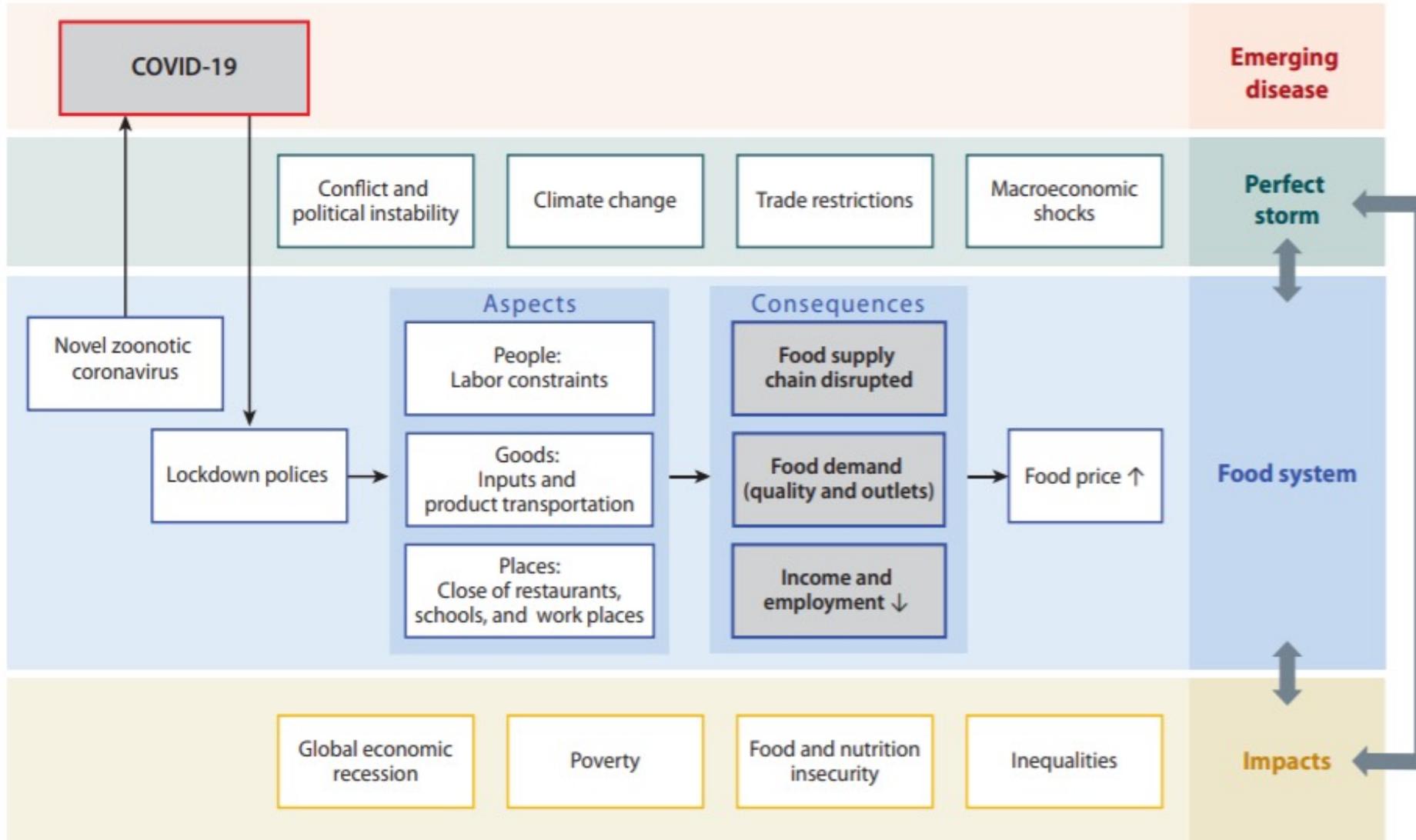
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China's Food Security in the Short Term

- **China's grain output hit a new record high in 2021**
 - ✓ More than 650 million tons for seven consecutive years
- **China's per capita grain supply has been consistently higher than the world average since 2010**
 - ✓ Exceeding 470 kg in 2019, above the international standard of 400 kg per capita
- **China's dependence on imports of staple grains is low**
 - ✓ From 2012 to 2019, China's annual rice imports averaged 2.97 million tons, accounting for about 3 percent of the country's annual rice output
 - ✓ Wheat imports are mainly structural imports of high-quality special wheat to meet specific needs
- **However, China still faces rising food security challenges in the long run**

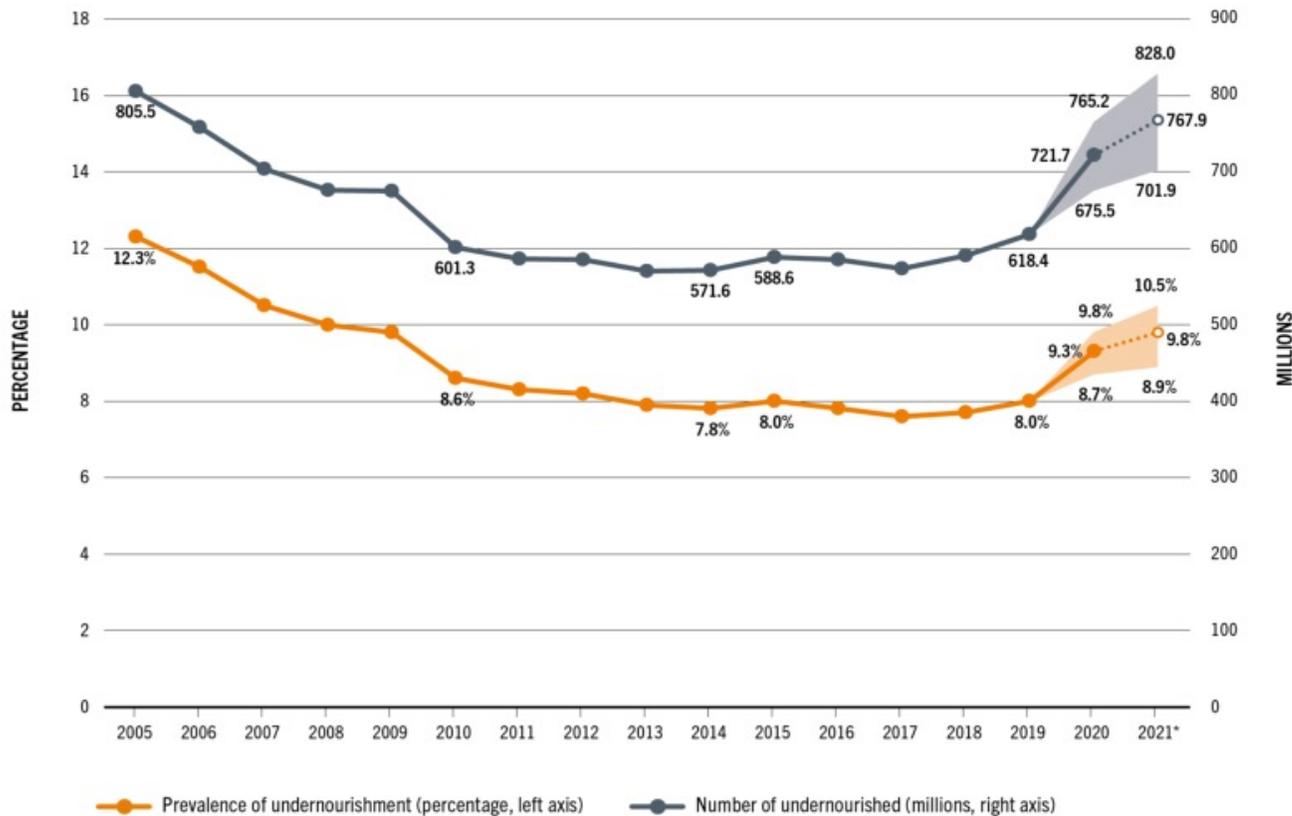
Increasing Risks and Coincidences of Risks to Food Systems



Perfect storm: When coincidence of risks in the global food system leads to compound effects on environment and natural resources, food supply and demand, whole value chains, welfare of consumers, and producers and other actors in food systems.

The COVID19 Pandemic & Geopolitical Conflicts

About 828 million people worldwide faced hunger in 2021



Source: FAO, The State of Food Security And Nutrition In The World, June, 2022

- An additional 150 million people have gone hungry since the start of the pandemic
- The Russia-Ukraine conflict is likely to further increase 18.8 million underfed people by 2023
- The major wheat producing countries are facing the increasing risk of droughts and the crop failure
- Protectionist sentiment is rising and many countries have imposed export restrictions

The Current Food Security Challenges in China (1)



Population explosion



Urbanization



High import dependence for some commodities



Extreme weather



- **With rapid urbanization, growing population and rising incomes, demand for food has yet to reach the peak**
- **Certain commodities are highly dependent on imports**
 - ✓ Soybeans, oil crops and beef
- **A scope to offer agricultural support is limited**
 - ✓ Domestic support: Amber policies has limited space and degree of green box depends on national financial resources and political target
 - ✓ Border protection is limited : tariffs and quotas
- **Adverse impact of climate change**
 - ✓ Climate warming increases the cost of agricultural production: the loss of soil organic matter and nitrogen, the shortage of water resources, and the cost of soil improvement, soil and water conservation and irrigation
 - ✓ The extreme weather events has increased an instability of agricultural production

The Current Food Security Challenges in China (2)



Soil erosion



Soil pollution



Animal and plant diseases



Nutritional imbalance



▪ Degraded natural resources

- ✓ The high production at the cost of environment and food quality
- ✓ Soil pollution and degradation is serious as 29.3% of soil is facing alkalization for example (China Geological Survey, 2015)

▪ Small-scale farmer households and the aging farmers

- ✓ With 230 million farmers in China, per household cultivated land area is less than 0.5 hectares (Chen Xiwen , 2016)
- ✓ Migration leads to severely aging in rural area

▪ Lack of agricultural S&T breakthrough

- ✓ Yields of major grains are still low
- ✓ Vegetable seeds depend on imports

▪ Overweight and Obesity

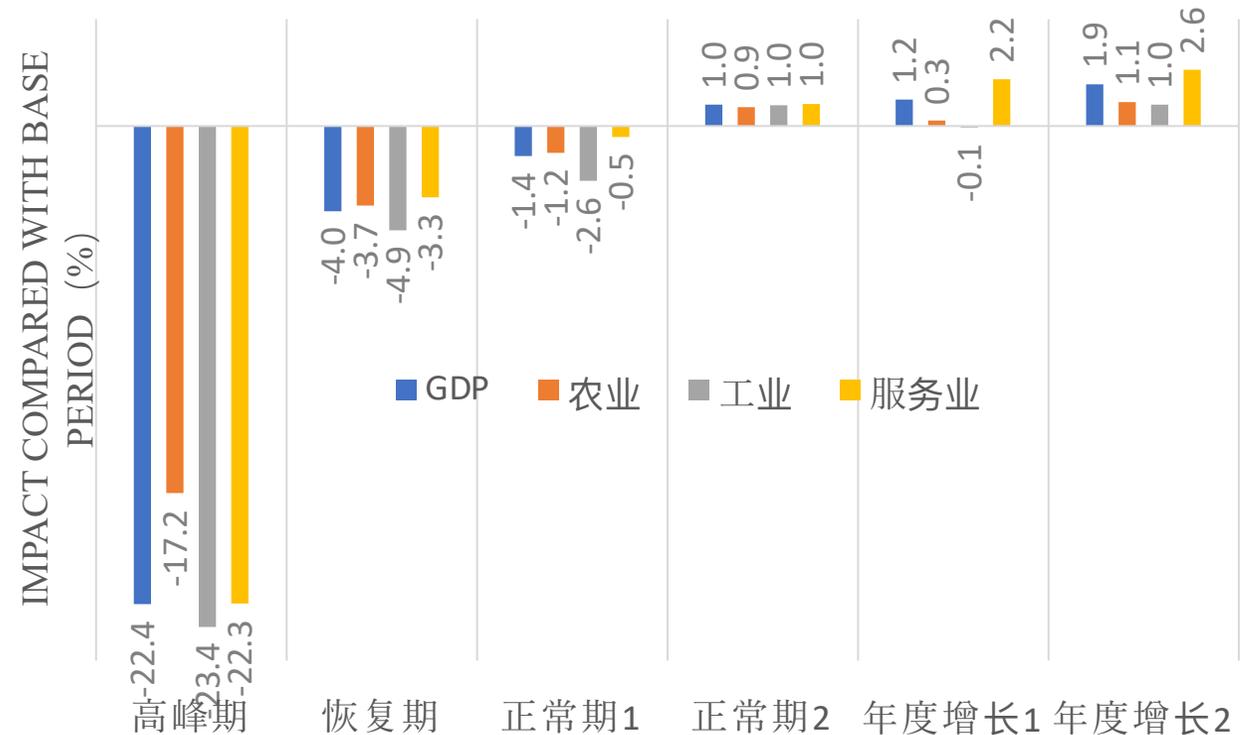
- ✓ Without proper measures in place, the overweight or obese population may cost 9% of China's GDP in 2025

Sign of Resilience during the COVID-19

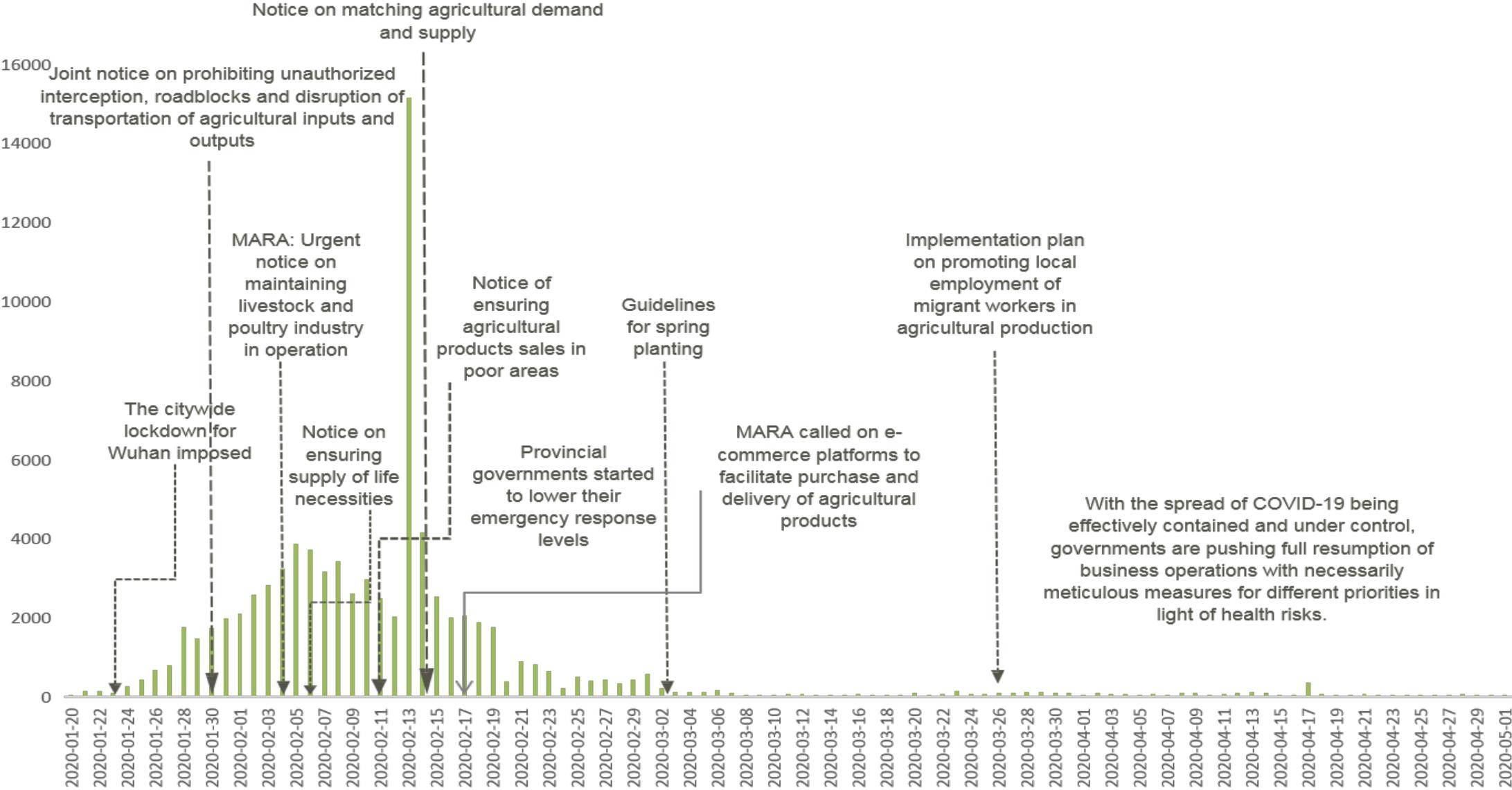
Agriculture as "Stabilizer" and "Reservoir"

- Since the COVID-19, agriculture has played a prominent role as a "stabilizer"
 - Compared with other manufacturing industries, agriculture is less affected by the pandemic
- Agriculture is relatively less dependent on the international market
 - The share of grain exports to total output and the share of imports to total demand are less than 5%
- During the pandemic, part of the labor force has stayed in rural areas to engage in agricultural production, and agriculture has played a "reservoir role"

The impact of the COVID-19 on the macro economy (%)
From the base period



From the early stage of the covid outbreak, Chinese government issued multiple notices to mitigate disruptions (Zhan and Chen, 2021)



Building Resilience post-COVID-19

- Similar pressures on the food system are expected to become more common in the future, calling for a need for **greater investments to build more resilient food systems** to avoid future events like COVID-19 turning into food and nutrition crisis, along with **immediate responses to mitigate short term disruptions**.
- **Resilience is more than just a buzzword**
“Helping people, communities, countries, and global institutions prevent, anticipate, prepare for, cope with, and recover from shocks and not only bounce back to where they were before the shocks occurred, but become even better-off.”
- **Building resilient food systems needs a long-term commitment to agriculture**

Actions to Build Resilient Food Systems: Stabilizing Domestic Production and Ensuring Supply

- **Implement strict farmland protection system**
 - ✓ Ensure that arable land is used for agricultural production and sown grain area in China is 117.6 million hectares in 2021, an increase of 0.7% over 2020
 - ✓ Encourage farmers to Increase the planting of soybeans and oil crops (Central Number 1 Doc)
- **Build reserves for grain and agricultural inputs**
 - ✓ The grain inventory-consumption ratio is higher than 17% - 18% proposed by FAO and wheat and rice stocks are enough to feed the whole country for one year
 - ✓ The national fertilizer reserve system was established in 2020 with more than 1,000 tons of fertilizer reserves released on the market in 2022
- **Promote service and financial support to smallholders**
 - ✓ Promote a development of third-party input service entities to tackle small scale challenge
 - ✓ Strengthen the agricultural risk management platform and provide farmers with agricultural credit, disaster insurance and other financial

Actions to Build Resilient Food Systems: Stabilizing Imports

- **Continue to diversify sources of imports**
 - ✓ In 2022, China expand imports of agricultural products from Brazil, Myanmar and Russia, and lifted the import ban of rapeseed from Canada
- **Promote a free and open agri-trade environment**
 - ✓ Take measures to facilitate global agri-trade and improve a resilience of supply chains
 - ✓ Undertake not to implement export restrictions that are inconsistent with WTO rules
 - ✓ Work with the WFP in humanitarian food procurement
- **Launch China's Global Development Initiatives on SDGs**
 - ✓ Global Development and South South Cooperation (SSC) Fund (\$US 3 Billion)
 - ✓ \$US 60 Billion Aid Package to Africa
 - ✓ Partnership with World Bank, the ADB, the FAO, WFP, IFAD and CGIAR on SSC
 - ✓ Aid to agriculture in the Belt and Road (B&R) Initiative

Actions to Build Resilient Food Systems: Promoting the Transformation of **China's** Food Systems

- **Produce more food with innovative technologies**
 - ✓ Increase both public and private investments in agricultural R&D
 - ✓ Build national seed innovation platforms
- **Increase investment in farmland infrastructure to cope with climate shocks**
- **Develop sustainable and resilient agri-food systems**
 - ✓ Reposition agricultural support for sustainable and low carbon transformation of agriculture balancing with its food security objective
 - ✓ Take measures (i.e. rural revitalization) to ensure that the livelihood of smallholders and low-income families in the poor regions are not affected by rising food prices