

Agricultural Science & Technology Policy Briefs of Recent 10 “No. 1 Documents” Issued by the CPC

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Background:

“No. 1 Document” used to refer to the first document issued by CPC (Communist Party of China) every calendar year. Today, it becomes a phrase indicating the importance of agriculture-related issues. The No. 1 Document is a guidance document and determines the policy focus of CPC this year. From 1982 to 1986, CPC has consecutively issued 5 “No. 1 Documents” with a subject of ‘three-folded agro-problem (i.e. the issues about agriculture, farmers, and rural area) and the policies have significant positive effect on economics and social development. Since 2004, 10 consecutive No. 1 Documents have been issued and agricultural technology and science development are always emphasized. Based on the importance of No. 1 Document, this paper summarize the basic content of the documents since 2004 and it can briefly outline the basic and important agricultural science and technology- related policies.

2013: Strengthening agricultural infrastructures for technology innovation

Improve the infrastructure and environment for science and technology innovation and intellectual property protection; keep supporting important agricultural technology projects like seed industry development; improvement of mechanization in grains, cotton and sugar industry; speeding up research on efficient and safe fertilizers and pesticides; promotion the construction of national "Agricultural High-Tech Park" and “Demonstration Park”.

2012: Boosting Tech-based agricultural modernization

Promoting agricultural innovation and extension from following aspects: plan and support cutting-edge basic research and try to obtain worldwide advantage in major fields; promote technology innovation according to industry demand, focus on key technology and common used techniques, connect basic research with industry; promote integrated innovation and break departmental, industrial and discipline-related isolation; develop better research environment through agricultural research institute reform and related regulations improvement and researcher’s autonomy expansion.

Adoption of advanced science and technology for agricultural modernization: integrate different sectors of agricultural science & technology innovation and extension; develop alliances among universities, research institutes and enterprises; ensure innovation to meet the industrial and market technology demand, be connected with industrial chain and based on comprehensive laboratories; solve technical difficulties efficiently.

Strengthening agricultural extension services: improve the environment for agricultural technology innovation; focus on seed-related research; increase local extension services; encourage research institutes to provide extension services; cultivate and support new agricultural service organizations; boost agriculture-related education and train more local applied and extension scientist.

2011: Intensify scientific and technological supports in terms of hydrometeorology and water conservancy

Improve the system of innovation in water conservation science and technology; intensify the infrastructure platform construction; strengthen basic research and technological R&D; make new breakthroughs in key areas, critical aspects and core technologies of water conservation; deliver a number of research findings of great practical value and step up the efforts to import and promote leading technologies.

2010: Increase capacity in agricultural technological innovation and extension

Put emphasis on the breeding of good varieties and speed up the creation of good variety extension system; Continue to implement the special programs on cultivating new varieties with genetically modified organisms and develop functional genes and new varieties with high applied values and intellectual property rights; Promote

industrialized production of genetically modified species on the basis of scientific evaluation and relevant laws and regulations.

Create and strengthen township or regional agricultural extension agencies and increase the number of demonstration counties for agricultural extension reform. Actively promote the development of diverse, market-based extension organizations. Launch the "special position in grassroots agricultural extension" program to encourage college graduates with agriculture-related training to work in grassroots extension agencies. Promote technological innovations for agricultural machinery. Promote agricultural mechanization.

2009: Increase inputs for agricultural technology and science

Inputs for agricultural technology and science will be increased, multiple channels will be explored to raise funds, agricultural scientific and technological innovation funds will be established and scientific research on priority fields, important products and core technologies will be supported as the priority. The important science and technology program of breeding of GMO new varieties should be accelerated, scientific research resources should be consolidated to intensify research and development, to breed as soon as possible high efficiency, high yielding and high quality GMO varieties that can resist pests and stresses, and to promote the formation of industrialization. Technological important projects of strong heterogenesis of major crops will be implemented. Agricultural IPR protection will be intensified.

"Dragonhead Enterprises" will be supported to implement national S&T projects. We will strengthen and improve modern agricultural integration technology system, promote activities in achieving high yield of grains, oil-bearing crops and cotton, support science & technology personnel and university graduates to work at the frontline of agro-technological extension. Agricultural science & technology training will be carried to nurture a new type of farmers. Through commissioning and bidding, farmers' specialized technological association and other civil organizations will be guided to implement agricultural technological extension service projects of public goods.

2008: Boosting agricultural technology innovation and application

Increase input for agricultural science and technology: mainly support basic and cutting-edge research projects of public agricultural research organizations and universities; integrate applied technologies; promote the alliance among universities, research institutes and enterprises and promote innovation activities; speed up the system construction of modern agricultural technology; enhance self-innovation ability of agricultural districts; launch important GMO new varieties projects; speed up the projects of new varieties-breeding for crops and animals.

Build and improve the "prevention and control system for animal and plant diseases": Speed up the construction of a complete, stable, strong and efficient animal disease prevention and control system; implement the official animal doctor certificate program; increase input for system construction of animal disease prevention and control; expand "Special Animal Disease Free Zone" construction; impose free compulsory vaccination for major animal diseases; improve the compensation mechanism for animal culling due to severe disease; speed up the research and production of efficient, safe pesticides and veterinary medicines; strengthen the basic work for animal disease prevention and control; cultivate and compensate for local panel for disease prevention and control.

2007: Strengthening system construction for agricultural science & technology innovation

Strengthen the system construction for agricultural science & technology innovation: increase input for agricultural research; enhance the innovation ability of national and regional agricultural research center.

Promoting resource saving agricultural techniques: extend water-saving irrigation techniques; launch water-saving demonstration projects; improve crop cultivation method; start compensating for practicing non-tillage farming; promote precise and semi-precise drilling techniques; promote efficient, concentrated animal-raising technologies; decrease feed and energy consumption.

Promoting agricultural mechanism: speed up mechanization for grains production; expand the scope of agricultural machinery services; coordinate machine use during busy seasons.

Speed up the construction agricultural information system: step up the information platform construction; further implement the "Golden Agriculture" project; build agricultural information network of four levels: nationwide, province-level, city-level and county-level.

2006: Enhancing agricultural science & technology innovation and extension ability

Further reform the agricultural scientific research system; step up the construction of national and local agricultural research center; improve the operation system of the research centers; improve investment environment for

agricultural technology innovation; cultivate venture investment in agriculture research; give priority to agricultural scientific innovation while allocating government budget and increase its proportion of the total investment of technology innovation; fund technology introduction and transfer; intensify intellectual property protection.

2005: Promoting High-tech Agriculture

Further extend fine seed and good planting practices; continue projects that develop and promote fine seed and good varieties for animals and aquatic animals; extend the compensation scope for important agricultural technology extension programs; give priorities to high-yielding and cost-saving oriented technology innovation; intensify the prevention and control of pests; implement “bring technology to household” project and cultivate leading household to create spill-over effect; continue funding technology introduction and transfer.

2004: Intensifying institutional reform of agricultural science and technology

Significantly increase the input for agricultural scientific research; aim at enhancing innovation ability and application/scale-up ability; encouraging private enterprises to be the main entity of technology innovation; allow agricultural enterprises and private agricultural-technology related organizations to apply for government technology innovation/transfer/extension funding; intensify extension system reform and develop the system involving both public sectors and organizations of other ownerships; promote the spill-over effect of agricultural demonstration park, science park, “dragonhead” enterprise and agricultural cooperatives in extension.

Remarks

The latest 10 consecutive No. 1 Documents issued by CPC indicates that: the focus of government agricultural technology innovation policies is slightly different every year while it’s all mainly about the innovation, application and extension of technologies. They all aim at promoting the stable and long-lasting development of agricultural economy and rural area in China. Reality shows some positive effects of the policies. Still, drawbacks exist and further efforts should be made to promote marketing technology and management system reform. All those will take one or more decades.

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