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Analysis of the Evolution of Core Discourse in China's Agricultural Information Service Policies: A Case Study of the Central "No. 1 Document" Since 1980 (Postprint)

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Abstract

[Purpose/Significance] This study investigates the construction and evolution of the core discourse system of China's agriculture-related information service policies since 1980, analyzes the social context of discourse formation, and provides statistical descriptions of discourse practices, aiming to offer references for research on precision agriculture-related information services. [Method/Process] Employing qualitative analysis methods and Fairclough's discourse analysis framework, this research examines the evolution of China's agriculture-related information service policy texts and their core discourses since 1980 from three dimensions: textual, discourse practice, and social practice, using Central Document No. 1 as the analytical object for discourse extraction, coding, and categorization. [Results/Conclusion] Since 1980, China's agriculture-related information services can be divided into two stages: The first stage (1982-1986) featured core discourses concentrated on limited subjects, objects, and content, with relatively low service levels and slow overall development of grassroots infrastructure; the second stage (2004-present) demonstrates that agriculture-related information services are no longer confined to traditional farmers, agricultural activities, and rural areas, but exhibit diversified target objects, expanded service subjects, increasingly blurred boundaries between them, and service content characterized by institutionalization, scaling, and personalization, as the agriculture-related information service system gradually forms. The two stages each possess distinct developmental characteristics and features, while also showing continuity and consistency, as well as extension and development.

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Preamble

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Analysis of the Evolution of Core Discourse in China's Agriculture-Related Information Service Policies: A Case Study of Central "No. 1 Documents" Since 1980

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Abstract

[**Purpose/Significance**] This study examines the construction and evolution of the core discourse system in China's agriculture-related information service policies since 1980, analyzes the social context of discourse formation, and statistically describes discourse practices, aiming to provide references for research on targeted agriculture-related information services. [**Method/Process**] Using qualitative analysis and Fairclough's discourse analysis framework, this paper analyzes the evolution of policy texts and core discourse in China's agriculture-related information services since 1980 from three dimensions: text, discourse practice, and social practice. Taking Central No. 1 Documents as the analytical object, discourse elements were extracted, coded, and categorized. [**Result/Conclusion**] Since 1980, China's agriculture-related information services can be divided into two stages: The first stage (1982-1986) featured limited subjects, objects, and content with relatively low service levels, and overall slow development of grassroots infrastructure. The second stage (2004-present) has seen services expand beyond traditional farmers, agricultural activities, and rural areas to include diverse objects and expanded service subjects with increasingly blurred boundaries. Service content has become institutionalized, scaled, and personalized, with the agriculture-related information service system gradually taking shape. Each stage has its own characteristics while demonstrating continuity, consistency, extension, and development.

China is currently in a critical period of social transformation and important stage of reform and development in agriculture-related information services. Governments at all levels have increased support and investment in these services. Central No. 1 Documents have continuously prioritized agricultural information service work as a crucial component of modern agriculture and socialist new rural construction, particularly in 2008 when the document explicitly called for "actively promoting rural informatization and improving rural information service systems." The 2018 Rural Revitalization Strategy also clearly identified rural informatization construction and agriculture-related information ser-

vices as essential for rural revitalization. The repeated emphasis on agriculture-related information services and requirements to improve service systems in Central No. 1 Documents fully demonstrates their importance.

However, due to China's large farmer population, wide geographical distribution, and inconsistent economic development levels across regions, significant gaps exist in the practice of agriculture-related information services, posing enormous challenges to discourse system construction. Therefore, analyzing the construction and evolution of core discourse in agriculture-related information service policies since 1980 is necessary from both practical and theoretical perspectives. This study examines the meaning construction process of China's agriculture-related information service policy discourse system and attempts to explain discourse changes through external factors (political, economic, socio-cultural environments) and internal factors (changes and development in discourse practice), providing references for future research, formulation, and implementation of agriculture-related information service policies.

2 Literature Review

As guiding documents for China's agriculture-related information services, policy texts play planning, directing, and leading roles in their development, demonstrating guiding and authoritative characteristics at the practical level and serving as important guarantees for progress. According to Yu Liangzhi et al. [1], research on agriculture-related information services began in the early 20th century with studies on agricultural specialized information, initially focusing on delivering agricultural technology information to farmers. From the 1930s to 1950s, scholars in agricultural science, sociology, and library/information science began paying attention to other types of information (such as agricultural product sales and rural economic information). During the 1970s-1980s, the rise of constructivist information theory and concepts like information inequality, digital divide, and small-world theory, along with changes in the social environment and practice of agriculture-related information services, drew researchers' attention to information needs and equality, prompting them to consider services from user needs and information fairness perspectives and expanding research horizons to broader information fields with deepening levels.

Domestically, rural reform implementation greatly enriched farmers' information needs (production and operation information, policy information, entrepreneurship information, etc.), while rural development attracted significant attention. Corresponding information services and policy support prompted scholars to focus on this field's development. Given the obvious interdisciplinary nature of agriculture-related information services, scholars in library/information science, agricultural science, and sociology have all contributed. Through literature review, this paper examines research from three perspectives: service objects and subjects, service content, and service platforms/models.

2.1 Service Objects and Subjects of Agriculture-Related Information Services

Service objects (users) are the recipients of agriculture-related information services—the target audience. Existing research typically uses "farmers" (those engaged in agricultural labor) or "rural residents" (those living in rural areas) to define service objects. However, due to transformations in traditional farmer identity, expanded activity regions, and diversified activity content, these concepts overlap, making consensus difficult. Many studies treat farmers and rural residents as the same group [2]. Additionally, scholars have devoted considerable attention to specific service objects such as rural vulnerable groups (women, left-behind children, elderly, disabled), migrant workers, and returning farmers [3-5].

Internationally, research on vulnerable groups has become a hotspot in recent years, particularly regarding women's and children's rights. E.E. Adomi [6] and G.J. Leckie [7] examined how women's social roles affect their access to and utilization of agricultural information services, while N. Shaifuddin [8] discussed Malaysian rural youth's perceptions of information sources and rural library services, finding that rural youth prefer continuing education information services.

Service subjects are the providers of agriculture-related information services, determining responsibility attribution. Scholars generally agree that government and non-profit institutions should be the main providers. The government-led "top-down" model has become the primary pattern. Agricultural research institutions and agricultural universities play crucial roles due to their special nature. In recent years, social forces have increasingly participated through two models: (1) government purchasing services from for-profit institutions (platforms, resources) and providing them free to farmers, and (2) non-profit information service organizations outsourcing projects to commercial institutions while maintaining free access for farmers, with government remaining dominant.

2.2 Constraints on Agriculture-Related Information Services

Literature review reveals that China's agriculture-related information service levels struggle to meet diverse user needs, resulting from both provider and user factors—insufficient supply capacity, weak awareness, and inadequate service capabilities on the provider side, and weak information awareness and acquisition abilities on the user side [9-10]. International studies on developing regions (Africa, South Asia, Southeast Asia) focus on service status, applications, and recommendations, especially ICT applications, while research on developed regions (North America, Western Europe, Australia) emphasizes information sources, service levels, information literacy education, and information inequality [11-14].

2.3 Platforms and Models of Agriculture-Related Information Services

Recent years have seen numerous studies on service platforms and models amid new rural construction and agricultural/rural informatization. Zhang Ying [15] found in a survey of a northeastern city's rural information service platform issues including low information quality, formats unsuitable for farmers' acquisition abilities, uncoordinated service institutions, unreasonable service channels, and lack of professional, scientific, and systematic top-level planning. Ma Ling and Hou Zhengwei [16] analyzed China's rural comprehensive information service platform construction, concluding existing platforms struggle to deliver agriculture-related information accurately and timely to users.

Yu Liangzhi et al. [1] categorized rural information service models into comprehensive and agricultural specialized services based on specialization levels, with the latter requiring greater precision beyond current regional capacities. Research on traditional physical service platforms like libraries, reading rooms, and farmers' book houses remains a hotspot [17-18], with scholars exploring how to better utilize these platforms. Recent years have seen attention to grassroots private libraries' roles, such as Heart-to-Heart Family Libraries and Yang Xiaosong Family Libraries [19-21]. Zhang Jian and Li Hongxia et al. [22-23] also examined advantages and potential roles of university libraries, particularly agricultural university libraries, in agriculture-related information services.

2.4 Research Review

Current domestic research on agriculture-related information services primarily focuses on status studies. Content-wise, research concentrates on practice-based phenomena like current status, promotion, and existing problems, while neglecting investigation and analysis of policy guidance and interpreting policy orientation intentions to describe and explain China's current agriculture-related information service system. Methodologically, studies mainly employ empirical research and subjective experience interpretation, rarely analyzing the meaning construction process of existing policies from discourse analysis perspectives. Policy research primarily examines government supply methods to provide decision-making support, while explanations of farmers' information disadvantages focus on geographical, income, and education disadvantages and market mechanisms. Although Yu Liangzhi et al. [2] introduced state will interpretation theory, few studies adopt this approach.

Policy discourse analysis research mainly divides into interpretive and critical tools [27]. Interpretive policy discourse analysis examines policy texts, phenomena, and problems from meaning dimensions, arguing that meaning construction, dissemination, conflict, and change determine policy evolution. Critical policy discourse analysis also studies meaning dimensions but focuses on revealing limitations of real political systems, particularly power-knowledge relationships, to discuss policy necessity and alternative public policy options.

Building on and innovating Foucault's discourse-power theory (Foucault viewed discourse not as pure language but as always connected to discourse practice—a set of statements with constructive, interdiscursive, and intertextual characteristics), and combining systemic functional linguistics with Western discourse theory, Fairclough created a three-dimensional discourse analysis system (text, discourse practice, social practice) emphasizing discourse construction and social practice.

3 Research Design

3.1 Basic Concept Definitions

Policy refers to the action programs, guidelines, and principles formulated by political parties and states to achieve tasks in certain historical periods, representing a strategic approach to political goals, embodiment of party or state will, basis and guidance for social group activities during specific periods, and having binding effects on social members and groups [24]. As policy texts embody state or party will, their discourse expressions reflect government directive and guiding intentions for relevant social activities, either as explicit requirements or implicit metaphors. Agriculture-related information service policy texts are important guarantees for service development, always explicitly or implicitly influencing their advancement.

Discourse refers to sets of statements that express meaning and construct knowledge using linguistic materials according to specific historical development, cultural evolution, and institutional rules (distinct from grammatical rules) in a field. These are collections of statements formed when discussing specific domains and subjects, such as laws, policies, rules, statistics, and research literature [25]. Discourse has strong power relations and ideological tendencies in both text and practice. Once formed in a field, it determines the "legitimacy" of expression for specific matters or topics. Discourse analysis helps reveal the construction process and historical limitations of this "legitimacy" [26].

Language's social attributes and practical features make it a social and historical research method [28].

3.2 Research Questions and Methods

Based on the above background, this study proposes: How has China's agriculture-related information service policy core discourse system been constructed and evolved since 1980, and how are corresponding discursive practices manifested?

This paper employs Fairclough's discourse analysis framework [29] to examine discourse evolution from three dimensions: text, discourse practice, and social practice. Combining research questions, this study forms a "social context-text-discourse practice" three-dimensional framework to analyze core discourse evolution in Central No. 1 Documents, including:

(1) **Social Context Dimension**: Analyzes external constraints on policy discourse formation—political background, economic environment, socio-cultural and technological contexts. Under specific social contexts, different political purposes generate different policy discourse construction needs to guide social group activities. Social practice analysis places discourse within discourse-power relations, focusing on social context analysis.

(2) **Text Dimension**: Focuses on textual linguistic analysis at the micro level, describing specific texts' linguistic features including grammar, semantics, and word choice. After reviewing and sorting different policy texts, this study selected 19 Central No. 1 Documents concerning "three rural issues" issued by the central government from 1982-1986 and 2004-2018 (the 2011 document on water conservancy reform was excluded as it lacked complete policy text significance). Agriculture-related information service discourse was extracted, coded, and categorized to form multiple core discourses and observe their evolutionary characteristics.

(3) **Discourse Practice Dimension**: Interprets text production, distribution, and consumption processes at the macro level, focusing on connections between textual analysis and social practice, including discourse practice achievements and deficiencies.

4 Core Discourse in China's Agriculture-Related Information Service Policies and Its Evolution

Since 1980, China's agriculture-related information services have undergone transformations in service objects, subjects, content, and models. Based on these changes, policy development is divided into two stages: 1982-1986 and 2004-2018.

4.1 Core Discourse in 1982-1986 Policies

4.1.1 Social Context Dimension Analysis In the 1980s, China's political, economic, and cultural systems were in reconstruction and recovery, with political situations gradually stabilizing. Economic development became society's primary task. Rural reform began, and "three rural issues" gained central attention, with five consecutive Central No. 1 Documents addressing them. Meanwhile, urban reform proceeded vigorously. Compared to urban reform, rural reform didn't receive equal attention, with smaller scale and intensity. As urban development required extracting surplus from rural areas, rural areas needed to subsidize cities [2], resulting in insufficient support and investment for agriculture-related information services. With agriculture's declining economic status, the central government gradually transferred rural agricultural service tasks to local governments, encouraging market-oriented rural services that marginalized information service infrastructure development. Additionally, household registration restrictions limited urban-rural population flow, reducing

cities' radiating and driving effects, largely confining agriculture-related information services to rural areas. Technologically, rural information infrastructure primarily relied on telephones and radio/TV broadcasting.

4.1.2 Text Dimension Analysis Analysis of Central No. 1 Documents from these five years and extraction of relevant discourse yielded three core discourse categories: service objects, service subjects, and service content/models. High-frequency word statistics (excluding service subjects due to frequent omission in policy texts) revealed the discourse order, shown in Figure 1 [Figure 1: see original paper].

Figure 1 High-frequency word distribution in Central No. 1 Documents (1982-1986)

During 1982-1986, besides "farmers" as the core object, "technology" appeared most frequently, primarily collocating with "service," "promotion," and "education," reflecting the main approach—"agricultural technology extension"—to meet farmers' needs for agricultural technology information. This aligned with China's social and technological development while revealing insufficient understanding of information needs. Second, service objects focused on general farmer groups and cadres. These high-frequency words constituted the discourse order of China's agriculture-related information service policy texts during this period.

(1) Service Objects. Table 2 presents extracted, coded, and categorized statements about service objects in Central No. 1 Documents (1982-1986).

Table 2 Text and coding classification of service objects in Central No. 1 Documents (1982-1986)

Category	Examples
General farmer groups	Farmers (D01), agricultural producers, laboring masses, commune members (D02), farmers (D03-D05)
Special farmer groups	Rural educated youth (D03, D05), specialized households (D01, D03)
Rural grassroots autonomous units and staff	Grassroots leaders and cadres (D02, D03, D05)
Agricultural technology personnel	Rural technical personnel (D03)
Township enterprises	(D05)

The discourse distribution shows service objects were farmers, specialized households, and cadres. Farmers served as pure information recipients from central and local party committees and governments. Grassroots cadres were both recipients (receiving training from higher-level information service institutions)

and providers (delivering services to farmers and specialized households). Additionally, with educational development and the reopening of college entrance examinations, the state emphasized cultivating rural construction talent, increasing attention to information services for rural educated youth.

(2) Service Subjects. Coding results (omitted due to space limitations) show: First, subjects included central and local party committees/governments and their staff, collective organizations, agricultural technology personnel, research institutions, and farmer technicians—basically consistent with service subjects (with agricultural technology personnel and research institutions equivalent to professionals). This demonstrates policy discourse consistency and continuity. Second, as Chinese farmers largely relied on "acquaintances" for information acquisition, farmers themselves became service subjects, with policy guidance and support. Third, with urban reform prioritizing city development, policy discourse only briefly mentioned "urban enterprises" in 1985 without positioning or requirements. Finally, since the 1950s, China established an agricultural technology personnel system to support technical information services, with "rural/agricultural technical personnel" frequently appearing in texts, demonstrating intertextuality and interdiscursivity.

(3) Service Content and Models. This stage focused on production/operation information and cultural information services. Production information centered on technology extension and market information, including promoting agricultural science/technology and achievements, and organizing mass technology cooperation and popularization activities (1982). The government developed deeper understanding of farmers' and agriculture's information needs, with statements like "…information, credit, and other services have gradually become urgent needs for agricultural producers (1983)" highlighting emerging demands. Urban construction also provided important platforms, as in "Large and medium cities should include agricultural product trade centers for market information communication and futures trading in urban construction planning (1984)." Cultural information services appeared metaphorically, such as "Strengthen construction of various cultural and health facilities in rural areas (1983)," primarily through building rural libraries.

Combined with social context analysis, Central No. 1 Documents during 1982-1986 used terms like "restore," "improve," "enhance," "enrich," "pilot," and "promote" to rebuild the agriculture-related information service system, "actively supporting and guiding" various services. Overall, core discourse featured few subject and object types with low service levels.

4.1.3 Discourse Practice Dimension Analysis Under policy discourse oriented toward urban economic development, discourse practice manifested in infrastructure construction and development. Statistical yearbooks show some service stations declined compared to 1980: agricultural technology extension stations numbered 15,114 in 1980, but only 14,035 in 1984, 14,242 in 1985, and 14,425 in 1986—nearly 700 fewer than 1980. Yu Liangzhi et al. [2] noted that in-

corporating telecommunications into economic reforms marginalized rural areas under commercial interests. Despite radio/TV development, rural information infrastructure remained relatively backward (Table 3).

Table 3 Rural information infrastructure construction in the 1980s

Infrastructure Type	1980	1981	1982	1983	1984	1985	1986
Agricultural technology extension stations	15,114	N/A	14,035	14,242	14,425	-	-
Rural township cultural stations	N/A	4,050	4,036	47,577	49,815	-	-
Rural market town cultural centers	N/A	7,956	9,236	10,172	10,586	-	-
Rural telephone households (10,000)	79.9	81.9	86.4	93.1	99.9	-	-
Rural telephones (10,000 units)	132.4	133.7	138.6	149.9	161.8	-	-
Rural post stations	N/A	N/A	N/A	N/A	22.2	-	-
Rural village broadcast rooms	N/A	175,766	197,249	212,508	225,420	-	-
Villages with broadcast access	594,047	542,050	563,227	554,451	549,712	-	-
Small broadcast networks	100,152	28,095	21,549	19,950	21,114	-	-

Data sources: 1980-1984 data from China Rural Statistical Yearbook 1985 [30]; 1985-1986 data from China Rural Statistical Yearbook 1986 [31], compiled by the authors.

The primary deficiency in discourse practice stemmed from insufficient financial investment, weak awareness and capacity, and failure to assign main service subjects for various information needs, resulting in multiple subjects responsible for the same needs while some needs were ignored. Service content focused more on economic information needs, neglecting other information needs in farmers, rural areas, and agriculture.

4.2 Core Discourse in 2004-2018 Policies

4.2.1 Social Context Dimension Analysis In 2004, the central government issued another Central No. 1 Document on "three rural issues," marking a new historical development stage and launching deeper agricultural reform. The 2005 document proposed the "more support, less extraction, and more flexibility" 方针 to improve agricultural comprehensive production capacity, indicating a shift from extracting rural surplus for urban development to making rural development the theme. In October 2005, the 5th Plenary Session of the 16th CPC Central Committee called for building a new socialist countryside according to "production development, comfortable living, civilized rural customs, tidy village appearance, and democratic management." The 2006 document proposed the "dual support" policy of "industry supporting agriculture and cities supporting rural areas" to advance new rural construction. The 2018 document themed on "Rural Revitalization Strategy" gave rural development unprecedented importance in overall social development. Urban-rural exchange and integration requirements made agriculture-related information services both a national economic development need and rural economic development necessity.

4.2.2 Text Dimension Analysis Analysis of 14 Central No. 1 Documents since 2004 extracted and coded core discourse (coding table omitted) and high-frequency words (frequency $ $3), shown in Figure 2 [Figure 2: see original paper].

Figure 2 High-frequency word distribution in Central No. 1 Documents (2004-2018)

During this period, general farmer groups remained primary service objects, while migrant workers and agriculture-related enterprises became important special groups. "Service" appeared 294 times (highest frequency: 37 in 2013), far exceeding command-style terms like "leadership," "management," and "guidance," reflecting consistency with "service-oriented government" discourse. "Information" evolved from collocating with "information service" to "information platform," "information technology," and "information network," demonstrating progress with the times, expanding service means, and improving application levels. These high-frequency words constitute the discourse order of China's new-era agriculture-related information service policy texts.

(1) Service Objects. Coding results show significant changes compared to the 1980s:

- **Diversification**: Agriculture-related enterprises and professional organizations (farmers' professional cooperatives, agricultural product cooperatives) became important service objects. This resulted from: (1) accumulated experience in serving farmers and cadres; (2) economic development creating existing enterprises and organizations needing support; and (3) their role as linking 纽带 that can also provide farmer information services with radiating effects. Agricultural product export enterprises emerged after China's 2001 WTO entry, requiring international market information, market access, and even trade dispute information services.
- **Migrant workers as service objects**: Though policy showed tolerance for urban-rural population flow in the 1980s, rights to education, residence, and free migration in cities only gained policy guarantees after 2001 household registration reforms in small towns. This explains why migrant workers existed in the 1980s but only received attention around 2000.
- **Internal differentiation within object groups**: Farmers and cadres gradually differentiated internally. Geographically, farmers were no longer simply rural residents; urban-rural boundaries broke as rural labor transferred to cities, requiring information services for employment, skills training, and other needs. Recent discussions focus on building information service systems for returning migrant workers' re-entrepreneurship [4]. For rural residents, internal differentiation emerged, particularly among vulnerable groups (children, women, elderly, occupational disease patients, disabled). For cadres, information services for rural party members and

cadres became prominent, with the Rural Party Members and Cadres Modern Distance Education Project serving as a typical example.

- **Improving farmer group knowledge levels**: As mentioned, rural educated youth in the 1980s represented the first knowledge-based differentiation. Subsequent discourse evolved to include rural college/vocational school graduates, university graduates, and returned overseas students, indicating continuously improving farmer knowledge levels requiring higher-level information services.

(2) Service Subjects. This stage's evolution features:

- **Unchanged dominant position** of central and local party committees/governments, with departments including agriculture, science/technology, planning, finance, materials, culture, and information as pillars.
- **Emergence of grassroots service teams**, especially rural teachers, doctors, and agricultural technology extension personnel. As society progressed, education, health, and technology gained importance. These knowledge-intensive fields required special attention to information services for these personnel.
- **Collective-level organizations** (supply and marketing cooperatives, agricultural product cooperatives, grassroots management teams, regional cooperative economic organizations, rural service organizations) as main service forces.
- **Evolution from agricultural technology personnel to science/technology commissioners**, with changed statements but unchanged nature—agricultural technology promotion personnel remain crucial.
- **Education and research institutions** (universities, agricultural colleges, research institutes, agricultural research institutions) playing vital roles in technology information promotion and services.
- **Agriculture-related enterprises**, especially leading enterprises, commercial agricultural information service enterprises, and intermediary service organizations, playing important radiating and guiding roles. With concepts like "smart agriculture," "rural informatization," "Internet+," and "digital agriculture," e-commerce and cultural enterprises increasingly focus on agriculture-related information services.
- **Gradual social force participation**: From early public welfare agricultural machinery promotion institutions, science popularization associations, and industry volunteer teams to current public welfare social organizations and rural public welfare foundations, social forces continuously penetrate information services. The 2018 document emphasized

encouraging all social sectors to participate in rural construction, leveraging advantages of labor unions, youth leagues, women's federations, science/technology associations, disabled persons' federations, and democratic parties.

- **Government guidance for farmers to meet their own information needs**: Service subjects continuously expand in scale, type, and depth. Some subjects also serve as objects (e.g., rural party members/cadres in distance education, agricultural technology extension personnel in the science/technology commissioner system, enterprises obtaining market information) to ultimately improve service capabilities.

(3) Service Content and Models. All service subjects provide information services for rural residents' production/operation needs (technology, economic, market information). The dominant central and local party committees/governments provide multiple service types: technology extension systems and science/technology commissioner systems for farmers; vocational skills training and employment information services for rural labor; information literacy cultivation and capacity enhancement plans for grassroots service teams; distance education for rural party members/cadres; and technology extension and market forecasting services for enterprises. Since 2004, central and local governments have allocated special funds supporting farmers' professional cooperatives in providing information, technology, training, quality standards/certification, and marketing services.

Other important contributors include agricultural collective organizations, education/research institutions, enterprises, public welfare technology extension institutions, and farmers themselves. For other information needs (medical/health, education, community life), central and local party committees/governments remain dominant, building rural distance education platforms, telemedicine systems, and other socialized service systems, especially grassroots cultural facilities like rural libraries and farmers' book houses for cultural information needs.

4.2.3 Discourse Practice Dimension Analysis This period's discourse practice manifests in: (1) Construction and improvement of various information service mechanisms. The Rural Party Members and Cadres Modern Distance Education Project launched in 2003; the "Every Village Has Telephone" project began in 2004; the Ministry of Commerce's "Ten Thousand Villages and Thousand Townships Market Project" started in 2005; the second round of "Broadcasting Access to Every Village" began in 2006. The Ministry of Agriculture and Ministry of Industry and Information Technology built rural comprehensive information service platforms according to "six ones" and "five ones" standards. In 2009, the Ministry of Science and Technology, Organization Department, and Ministry of Industry and Information Technology jointly launched national rural agricultural informatization demonstration province construction. During the 11th Five-Year Plan, rural cultural information service projects restarted,

marking a second development peak.

(2) Discourse practice features large scale, wide coverage, and high levels. China's agricultural information service pattern of "county-level service institutions, township-level stations, and village-level points" has basically formed, with full coverage of rural information service institutions. Relevant departments have deployed over 8,000 agriculture-related information collection points nationwide for remote collection and provision of multi-sector information. Governments have opened various internet service channels including government affairs websites, WeChat services, government Weibo, and government Toutiao accounts to meet diverse "three rural" information needs.

Deficiencies include the long-term "multiple takers, few givers" policy-derived "thousands of threads above, one needle below" rural information supply model, which adversely affects long-term development. Although policies attempt to build discourse systems for farmers to provide and meet their own information services, resource allocation gaps at township levels and below, particularly in village self-governance organizations, hinder effective implementation. This results in information service platforms and means failing to function in the "last mile," with service levels and quality unable to meet farmers' diverse needs. Additionally, multi-head participation leads to inconsistent rights and responsibilities, preventing policy intentions from achieving discourse practice.

4.3 Evolution Characteristics of China's Agriculture-Related Information Service Policy Core Discourse

Analysis of Central No. 1 Documents reveals China builds agriculture-related information service discourse systems through statements on service objects (clarifying service purposes), subjects (determining service responsibilities), and content/models (identifying service themes). Due to evolving statements, China's agriculture-related information services demonstrate multidimensional characteristics: continuity and consistency, leap and discontinuity, extension and development.

4.3.1 Continuity and Consistency Policy discourse continuity and consistency concern intertextuality and interdiscursivity—the inheritance, transformation, and innovation of historical discourse practices, reflecting discourse construction consistency.

Since 1980, continuity and consistency appear in: (1) Service objects—farmers and grassroots cadres as main recipients remain consistently mentioned with minimal conceptual variation; (2) Service subjects—central and local party committees/governments remain the dominant force, with collective organizations, research/technology institutions, relevant enterprises, grassroots service teams, and farmers themselves as important components, maintaining inheritance and continuity; (3) Service content—agricultural technology and cultural services

remain core since 1980, addressed annually with modifications based on social context; (4) Service models—government-led models with other forces' support continue promoting development.

4.3.2 Leap and Discontinuity The two stages show significant leaps and discontinuities. The first stage focused on agricultural economic and technology information needs with simple object groups (farmers and cadres), government-extended institutions as main subjects, and traditional media as primary means. The second stage expanded coverage from economic to social, political, and cultural domains, with diversified objects, multi-supply subjects including government, enterprises, and third sectors, and parallel internet-traditional media approaches. Over the ten-plus years between stages, China's rural economy achieved substantial development in subject capacity, user acceptance, and technology. In 1986, the Ministry of Agriculture established the Agricultural Information Center, with the agricultural information management system pioneering agricultural service informatization. In 1994, China formally joined the Internet and launched the "Golden Agriculture Project." In 1997-1998, national agricultural portal websites (www.agri.gov.cn and www.cast.net.cn) were established, demonstrating sufficient attention. These key practices failed to timely reflect in Central No. 1 Documents, creating distinct discontinuity when "three rural issues" reappeared in No. 1 Documents.

4.3.3 Extension and Development Policy core discourse extension and development refer to discourse innovation. China's agriculture-related information service policy discourse shows stable, gradual evolution, increasingly focusing on service objects' "feasible information capacity" [32]—the substantive freedom of information subjects to meet their own needs, constrained by structural and agency factors. Current discourse concentrates on structural factors like economic conditions, infrastructure, and information resources. Facing multiple information needs in agricultural production, rural life, and returning entrepreneurship, future policies should, while continuing to improve structural factors, pay more attention to agency factors like information awareness and skills. Future discourse directions include: (1) Maintaining scientific, consistent, and continuous texts with improved discourse systems; (2) More complete logical coherence across multiple subjects for same-oriented services; (3) More efficient practical activities among multiple actors.

4.4 Future Discourse Directions for China's Agriculture-Related Information Service Policies

Policy text discourse is a set of statements constructed by policymakers using language according to specific social (historical, cultural, institutional) rules to build knowledge and express meaning. The analysis reveals that despite constructed discourse systems with guiding intentions, practice fails to manifest, indicating problems. Future work should focus on constructing strategies to improve service objects' feasible information capacity within specific discourse

systems. For example, though the "No. 1 Document" guidance involves governments and social bodies at all levels, resource allocation below township levels cannot be guaranteed, especially in village self-governance organizations, preventing platforms and means from functioning in the "last mile" and failing to meet diverse needs. Multi-head participation also causes inconsistent rights and responsibilities, hindering discourse practice realization.

Additionally, this analysis only uses 19 Central No. 1 Documents. Despite their macro-guidance positioning effectively revealing discourse-practice gaps, they cannot cover specific policy aspects, limiting precision in constructing discourse practice strategies. Future research using more specific policy texts for discourse analysis combined with particular service contexts can help build more targeted strategies.

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Author Contributions

Wang Hanqing: Data collection, paper writing and revision
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Core Discourses Evolution of Chinese Agriculture-related Information Service Policies: Based on No. 1 Documents since 1980

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Abstract: [Purpose/significance] This paper tries to study the construction and evolution of the core discourse system of Mainland Chinese agricultural information service policy since 1980, analyze the social background of discourse formation, and count and describe the discourse practice to provide reference for targeted agricultural information service. [Method/process] By the method of qualitative analysis, this paper took Central Document No. 1 as an example and based on Fairclough's discourse analysis theory, analyzed the evolution of Chinese agricultural information service policy text and its core discourse from the three dimensions of text, discourse practice and social environments

since the 1980s, then the policy discourse were extracted, coded and classified. [Result/conclusion] Through the research, it is found that Chinese agriculture-related information service can be divided into two periods since 1980. The first stage is 1982 to 1986 which call recovery period and it showed few agricultural-related information service subject contents and object types, and a low level of information-related services. Meanwhile, the development of infrastructure is generally slow. The second stage is from 2004 to the present, the agriculture-related information services not limit to traditional communities, activities, and rural areas. Not only have the objects been expanded, enriched and extended, but also the subjects. The activities have been institutionalized, scaled, and personalized, and information service system of agriculture-related has gradually taken shape. Each of the two stages has its own characteristics, but on the whole, has continuity and consistency, extension and development.

Keywords: information service; policy text; discourse analysis; Central Document No. 1

Note: Figure translations are in progress. See original paper for figures.

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