# Resident participation in the context of public health emergencies: Take community group purchase in Shanghai as an example

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Abstract: In the face of the COVID-19 epidemic, many residents have a shortage of materials and unmet basic material needs due to insufficient government support and high community operation in the process of sealing and control. During the epidemic prevention and control period, a group of teams calling themselves "regiment commanders" appeared in Shanghai to organize residents' group shopping funds, which alleviated the living difficulties of Shanghai residents to a certain extent, solved the government's supply problems, promoted the formation of a diversified co-governance pattern, and improved the effectiveness of social governance. The regiment leader comes from various industries in society. They actively participate in grassroots social governance and become the backbone of new students in social governance, highlighting the great potential of social governance. This paper analyses the group purchase operation mode of a "commission leader" in Shanghai as the entry point for investigation, and uses the theory of citizen participation and the theory of diversified governance to give countermeasures for the development prospects of Shanghai's "commission leader" from three perspectives: technological breakthroughs, sinking of party members and community intervention.

Keywords: community group purchase; community governance; resident participation

#### 1. Resident participation in community governance

The community is the last kilometer in the grassroots governance link, the connection between the government and the residents, is of great significance to the people and national governance, and is closely related to the implementation of the policies and principles of the Party and the state. Since the outbreak of the COVID-19 epidemic, the community has given full play to its advantages. Governments at all levels across the country have taken the community as the basic unit to strictly prevent and control the import of the epidemic, effectively prevent the spread of the epidemic, and have become the backbone and effective position to deal with public health emergencies. The 19th National Congress of the Communist Party of China pointed out: "strengthen the construction of the community governance system, promote the shift of the focus of social governance to the grassroots level, and give full play to the role of social organizations to realize the benign movement of government governance and social regulation and residents' autonomy." Community governance is a brand-new picture in the process of community development. It is particularly important to strive to build a new development pattern of community "co-construction, co-governance and sharing", stimulate the endogenous motivation of the community, and promote the participation of multiple subjects in community governance. Community governance needs to be people-oriented and based on people's livelihood, and the whole society and residents need to be mobilized to participate in the governance process. Some scholars use the "multilevel linear model" to point out that social capital has a greater impact on community vitality and residents' participation. We can see that in regions with a higher the level of economic development, the stronger the willingness of residents to participate in community governance [1]. Under normalized society, the practice and effectiveness of residents' autonomy are limited. After the outbreak of a largescale COVID-19 epidemic in Shanghai, the drawbacks of small community workers, complicated tasks and imperfect institutions and mechanisms have been "expanded". In critical moments, Shanghai residents have brought the effect of residents' autonomy to a new level. Many residents He spontaneously became a "head of the group" to solve the problem of material supply, coordinated and coordinated suppliers, residents and distribution, and continuously optimized the process to form an early "community group purchase" business model, from the initial simple group purchase to the formation of a complete "industrial chain"; from the original "vegetable group" and "drink group" to " Dessert balls,

cold and fresh balls... The regiment leader is a milestone in the development of residents' autonomy, integrating third-party social forces such as enterprises into community governance more closely.

In 2022, a large-scale COVID-19 epidemic broke out in Shanghai. Since the "4+4" epidemic prevention measures were taken with the Huangpu River as the dividing line on March 28, after Pudong New Area entered the sealed state, many urban areas in Shanghai have also entered the state of sealing and control management. Shanghai has a high level of economic development and dense population. Although Shanghai's overall material reserves are sufficient, due to the impact of the epidemic, the Shanghai Municipal Government cannot fully take into account every resident in terms of maintaining supply. Some vegetable markets and commodity supply supermarkets cannot operate, while community e-commerce such as "Hema" and "Meituan Preferred" The transportation and distribution rate at the end has also dropped significantly, and many residents are in short supply of necessities such as rice, flour, grain and oil, seasonal vegetables and fresh meat [2]. According to the expected plan, residents contact the insurer on a household basis to purchase materials to ensure basic material life. In the actual situation, due to the characteristics of large orders, strong dispersion and high regional repeat rate, most suppliers are unable to deliver each order separately, and the transportation and distribution ring of materials. There are also risks such as shortage of transportation and indirect infections, resulting in the dilemma of many suppliers becoming "unable to sell goods". However, when residents react to the community about the lack of living materials, they found that "an important position for epidemic prevention and control" the community has shown a high-intensity operation trend, and the community is no longer unable to solve the problems of residents. On the one hand, online e-commerce cannot complete and accept a large number of orders, and offline supermarket sales channels are few. On the other hand, the demand of residents is increasing day by day, and it is difficult to grab materials with few online and offline purchase channels. Against this background, the needs of both sides are connected, and the community group purchase model is used to digest the supplier's goods, that is, most online and offline sales routes have been transferred to the "group leader"[3]. Slowly, group purchase organizations centered on "group leader" have appeared in various communities to purchase, eliminate and distribute materials. Compared with the new community group purchase e-commerce, this is a community group purchase model spontaneously formed by residents under the influence of the epidemic.

#### 2. The Case

In grassroots governance, public participation and residents' autonomy are the core and key links. In this Shanghai epidemic, grassroots autonomy has sprouted with strong vitality and renewed vitality. In countless communities, the community group purchase group has flourished overnight. The "Lead of the Shanghai" integrates the needs of the community with the community as a unit, contacts the supplier super enterprises, and organizes volunteers in the community to receive materials, disinfect and sterilize, and carry out contactless distribution. It seems simple to operate, but it is difficult to implement every step.

According to the relevant data analysis, about 28% of the "commission leaders" think it is the most difficult to distribute materials in the most difficult links. In addition, the more difficult are: material purchase (18.3%), transportation and distribution (16.6%), finding the source of goods (14.9%), data integration (7.4%), and managing the volunteer team (2.9%), collection (1.1%) [4].

Yu Jie (pseudonym) is a resident of a community in Jiaxing District, Shanghai. After the outbreak of the epidemic in Shanghai, due to the lack of materials in her family, she participated in the community group purchase of the community and became a "head of delegation". In the early stage of group purchase, the goods purchased by the group were mainly meat, vegetables and vegetables, and Yu Jie was the "leader" responsible for some basic materials.

#### 2.1. Supplier contact link

In the process of contacting suppliers, Yu Jie is faced with the group purchase loss of group purchase due to the sudden shortage and running out of supply goods, tight transportation during transportation, or sudden accidents resulting in the interruption or stagnation of transportation, and the number of group purchasers who do not meet the requirements of suppliers. Not only that is the dilemma of failure. In the process of goods transportation, affected by the type of goods and indirect infection leads to positive conditions in the process of testing the COVID-19 epidemic, resulting in the failure of group purchase. In the list of supermarkets of suppliers in various districts released by the Shanghai Municipal Government, the number and types of materials provided by enterprises near a community are limited,

and the radiation range of enterprises is also limited. It is difficult to find enterprises that guarantee soybean products and milk near Yu Jie's community. In the face of residents' demand for materials and basic daily necessities. It is gradually booming, and some suppliers are unable to provide materials in time, which affects the normal life of residents. In the face of such a dilemma, Yu Jie gave full play to his interpersonal advantages to find reliable and efficient guarantee enterprises. The successful experience of many group purchases and continuous screening of information also allowed Yu Jie to choose the most efficient and high-quality suppliers providing homogeneous goods, and formed a stable supply chain.

#### 2.2. Collect and integrate data links

As the head of the delegation, Yu Jie also needs to integrate and collect data in the statistical community. According to Yu Jie's description, in the early stage of group purchase, WeChat solitaire was used in the group to collect data statistics, so whenever there was a group, Yu Jie would send "following the dragon" in the group to notify residents to participate in the group purchase. However, during the epidemic, people can't always pay attention to the news in the community group when they work and study at home. Therefore, there is often too much information about "following dragons". Some people who browse the information are easy to mistake and miss the information of group purchase, so that when the goods are delivered, they find that they have followed the wrong "dragon", or they don't. Buy the goods you really need. Yu Jie's difficulty in responding to the needs of information communication in a timely manner makes it more difficult for residents to buy groups, and it is also very difficult for Yu Jie to statistically integrate information. In addition, there are many kinds of group purchases, the release time is not unified, and occasionally there is information chaos. Yu Jie himself is often worried about the cause of his mistakes and mistakes and omissions. Residents did not buy the necessary goods. Fortunately, with the continuous expansion of the scale of group purchase, many volunteers have brought "advanced experience" of enterprise. Through the upgrading of technology and the improvement of the chain, community group purchase led by the "leader of delegation" has gradually been chained and scaled. In the group purchase group led by Jie, "temporary customer service" appeared to provide answers to residents who have questions without seeing the news in time, and the data collection has also changed from the traditional "WeChat Solitaire" to Tencent sharing documents to record data and collect information in real time. After the information is collected, Yu Jie should quickly check the goods, number of people, personnel names, personnel communication methods, personnel addresses and specific amounts of the group purchase, and submit them to the "large head of delegation", forming a perfect information communication model.

#### 2.3. Elimination and distribution link

The most critical and laborious thing is the elimination and distribution of materials. Due to the large quantity and variety of materials, the large area of the community and the large number of households, contactless distribution should be achieved according to the requirements. In Jie's description, she can only rest for a few hours a day. After getting up early to contact the supplier, Yu Jie needs to test the COVID-19 epidemic and wait for the result to be negative before going out. In the face of residents' lack of cooperation, incomprehension and even slander, Yu Jie herself often feels exhausted, but Yu Jie said Most residents are willing to cooperate and often receive goodwill from strangers, which constantly encourages Yu Jie to continue to persevere and move forward.

The "Lead" also needs to sign the "Lead of Mission" responsibility commitment in the community. As the initiator of the group purchase, the "Lead" should be responsible for ensuring the safety of the material source, production, warehousing, sub-chain, transshipment, distribution, etc. of organized group purchase [5]. It needs to organize volunteers in the community to eliminate, as well as the guaranteed funding quality of logistics passes and suppliers. It means that through continuous practice and exploration, as well as the accumulation of experience, the group purchase process, which has been chaotic from the beginning, has gradually become orderly.

According to the 2022 Shanghai Head White Paper released by the Shanghai wow platform, there were 130,000 guaranteed heads of delegation in Shanghai during the epidemic, who were responsible for the group purchase of vegetables, meat, eggs, rice, flour, grain and oil and other guaranteed materials, and 650,000 improved regiment leaders to buy steak, seafood, bread and milk drinks and other improvements for residents. Nearly 90% of the "regiment leaders" have their own jobs. Most of them come from the trade, consumption, manufacturing and service and sales industries, accounting for 16.0% of the total, and the advertising and media industries ranked third, accounting for about 13% [6]. (As

#### shown in the figure 1 below)

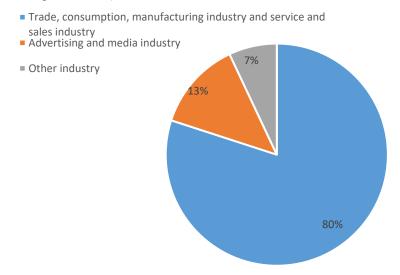


Figure 1: Percentage of occupation composition of "head of regiment"

#### 3. Path Exploration

Shanghai has shown the spirit of the fight against the epidemic in the new era under the background of the major public health emergency, and also provides a clear example for other countries and regions to fight the epidemic and give full play to the role of public participation. Shanghai's "head of delegation" came into being during the epidemic control period, which is a social emergency response phenomenon. The "heads of the regiment" were ordered to provide services to residents in the face of danger. From the former "guarantee" materials to the later "improved" materials, the lives of residents have been guaranteed, which solves the problem of poor sales of Shanghai's agricultural products to a certain extent. This not only makes up for the shortcomings of the Shanghai government in supply, but also wakes the alarm on how the Shanghai government can do a good job in people's livelihood while preventing and controlling the epidemic. There is no doubt that the "commission leader" in Shanghai has opened up another vast world of social governance in Shanghai, opened up a realistic perspective of co-construction, co-governance and sharing, and is a new social force. According to statistics, 81.1% of the "commission leader" expressed their willingness to continue to serve in this profession. The development of Shanghai's "commission leader" conforms to the trend of the times and will not stagnate. The author will give countermeasures from the perspectives of community intervention, the sinking of party members and technological breakthroughs.

#### 3.1 Technological breakthrough

During the epidemic prevention and control period in Shanghai, the "commission leaders" made a leap forward technically in order to complete orders better and faster and meet the needs of residents. According to data statistics, during the epidemic, the data integration of the "WeChat Solitaire" transitioned from "WeChat Solitaire" to the applet. Among them, the most commonly used are the fast group purchase under an enterprise brand, which quickly realized the chain and standardization of group purchase. Shanghai is a super modern city with a developed economy and a perfect infrastructure. As a brand-new digital technology, blockchain is open, independent and decentralized, coupled with its difficulty of tampering, which brings more security, lower cost and stronger efficiency, so that blockchain can be broken in community group purchase. The limitations of time and space interweave and integrate physical space and virtual reality, connect separate and scattered subjects, and realize the coordinated development of multiple subjects. Weave a complete and efficient "group purchase" collaborative network by straighten out the relationship of rights and responsibilities between enterprises, head of delegation, distributors and users[7]. Shanghai's "head of delegation" should keenly capture the dividends of technological reform, introduce blockchain into grassroots community group purchase, realize the vision of better and better completion of each order through technological innovation, enrich the content of the smart community, and create a smart "group purchase".

#### 3.1.1 Create a blockchain group purchase technology platform

The most obvious role of blockchain is to connect multiple independent micro-subjects to develop collaboratively, share data, and build a platform with a high degree of specialization, which means that multiple subjects can track the dynamic progress of each link in real time and pay attention to the status of each item from factory, delivery, arrival, distribution and acceptance. Now the whole process and the whole link are intelligent. When the order takes effect, the operation of multiple subjects cooperates and supervises, and the data is transmitted to the multi-party main terminal. The execution process of operation is formulated by the platform through cloud computing, big data, etc., which realizes the unity of order production and operation, thus reducing labor consumption, greatly reducing the risks arising from each link, and improving the group purchase. Service efficiency. Moreover, due to the difficulty of blockchain tampering, it also clearly delineates the implementation specifications of each subject to prevent the chaos of pulling the prevarication, and truly realizes the self-push network structure based on endogenous power.

#### 3.1.2 Technology-driven innovation

Shanghai has strong scientific and technological strength and perfect urban infrastructure construction. In recent years, smart cities, smart communities, smart properties and other projects have been implemented, and many innovative technology enterprises have been launched and operated. The vigorous development of emerging technologies has laid a solid foundation for the development of blockchain. Embedding blockchain into the "group leader" model can drive the development and innovation of community group purchase in terms of organizational structure, subject coordination, service efficiency, etc. Formulate the "inventory" system, intelligently connect services and demand, build an interactive sharing platform, standardize the information registration of "group leader", "group leader", supplier, distribution and household, improve purchase service, distribution service, after-sales service and other aspects, and deal with all kinds of "production" in a refined, intelligent and efficient manner. The personalization and specialization of "pintuan" to improve the overall level of community group purchase service.

#### 3.1.3 Improve the openness and transparency of data

The data is open and transparent, and the information is safe and reliable. Blockchain data storage is difficult to tamper with, track and position, and share transparently. The stored information corresponds to the main body. The main authorizes some of the information to the platform, and multiple subjects carry out real-name authentication. The information is true, effective and reliable, and the recording and use of any subject information cannot be changed. And it can be inquired. All parties can trace back to the source. The data is open and transparent, and multi-party sharing, so that group buying can run in the "sunlight", thus eliminating the trust crisis caused by the opacity of information and the difficulty of distinguishing the authenticity of information, reducing the lack of information in each process link, and greatly improving the trust between the subject. Interest symmetry. Through blockchain technology, all information can be effectively protected and saved, and high security also protects the privacy of both service providers from disclosure, improving the efficiency of community group buying.

#### 3.2 Party members sink

Community governance must start from the fundamental interests of the people, adhere to the concept of putting people first, strive to protect the interests of the masses in every work, and let the fruits of development benefit the masses. According to statistics, most of the people who assume the position of "regiment leader" are party members and league members, of which 2.3% of the "regiment leaders" come from party and government organs or non-profit organizations. In the future development of group purchase, we should integrate party building with the lives of residents and give full play to the vanguard and exemplary role of party members in their work. It is the basic working mode to meet the needs of the masses and promote the active participation of the masses.

## 3.2.1 Establish a combination of party building and mass life, and innovate the working mechanism of the party and the masses

To improve the effectiveness of community governance, we must strengthen the leadership of the Party, strive to extend the Party organization to the grassroots level, and standardize community development. In the future development of group purchase, the political literacy of the "group leader" should pass the test, the political consciousness should be correct, and the political understanding should be clear. Efforts should be made to make the community group purchase "close" to the party organization.

As mentioned above, Jin, the director of the neighborhood committee, uses his own network resources to coordinate all parties to finally complete the group purchase. Although the community has small potential but great potential, the "regiment leader" should be good at combining group purchase with the community, using the relevant resources of the community to give full play to subjective initiative, integrate resources, and better meet the needs of residents.

#### 3.2.2 Create a pattern of community co-construction and innovate the path of party building

In this regard, it is a measure with the masses as the main body. Community party building should actively support the work of the "regiment leader", open up channels and channels for residents to respond to the demands of interests related to group purchase, let more residents participate in group buying, and improve the willingness of residents to autonomy. This measure gathers public opinion, gathers people's wisdom, enjoys democracy, and feedbacks the opinions of the masses to the "commission leader" in a more standardized form, which is conducive to the head of the delegation to analyze and review the data, investigate the demand trends of residents in the community, and select the goods and enterprises that the residents are most satisfied with. In this process, residents can also assume the role of supervision and supervision, and be able to respond to the loopholes and disadvantages in the group purchase process to the community and the "regiment leader" in a timely manner. Introducing residents as the main body into the process of group purchase, we have improved the pattern of coconstruction, co-governance and sharing, and realized that the community share the results of group purchase.

#### 3.2.3 Strengthen the leadership of party building and play a pioneering and exemplary role

In community work, party members should "stand guard" on the front line, and capable party members should actively become "regiment leaders" and take on the heavy responsibility of serving the people. Party members take the lead in striving to be the "leader of the regiment" and leading volunteers to do a good job, expand and do better group purchase. Not only in the normal period, but also in the epidemic prevention and control stage, party members should play an exemplary role in helping residents organize group purchases, and also help aging residents enjoy the maximum benefits in the community e-commerce environment. The community also actively encourages the majority of party members or on-the-job party members to actively undertake the work of "regiment leaders", strengthen the contact between the party and the masses, and enhance the enthusiasm for group purchase through party building, which greatly promotes the harmonious and healthy development of the community and improves the residents' sense of community belonging.

#### 3.3 Community involvement

The community is the "last kilometer" of grassroots governance. During the epidemic prevention and control period in Shanghai, the community has undertaken a lot of basic work. In the face of residents' demand for materials, it is caring and powerless. Therefore, even if the community realizes that the risk of community group purchase is very high, in order to ensure the needs of people's livelihood, the community must support and help the "regiment leaders". Organize a group purchase." When organizing group purchase, the regiment leader is divided into paid and free. The paid type makes the "regiment leader" and the residents constitute an economic behavior, and the unpaid type is a public welfare behavior. In order to make the group purchase run on the formal track and neutralize the contradiction between the "Lead of the regiment" and the residents, the community plays an important role in group purchase.

#### 3.3.1 The community should educate and guide the "regiment commander"

During the epidemic prevention and control period in Shanghai, the operation process of group purchase has a great communication risk, which is easy to cause secondary disasters. Therefore, every link must be eliminated. As the initiator and person in charge of group purchase, the "group leader" must ensure the safety of group purchase. In special times, more attention should be paid to the group purchase in future development. The risk management of purchase guides group purchase to gradually standardize. Therefore, in terms of law, the community must strengthen the education of the relevant laws and regulations of the "Lead of the League" in the future, guide the "Lead of the League" to choose enterprises correctly, choose guaranteed enterprises with good credit history and good commodity quality, and guide the whole process of group purchase. In terms of morality, elderly residents in the community will not use smartphones. The community should strengthen the moral education of the "head of delegation", promote the "head of delegation" to take care of the elderly who are not good at using intelligent applications, and help the elderly participate in community group buying as much as possible.

#### 3.3.2 Standardize the community group purchase process

During the epidemic prevention and control period, foreign materials in the group purchase process need to enter the community, and there is a risk of virus transmission. The community must standardize the whole group purchase process. Therefore, in the future group purchase process, the "regiment leader" should report in advance before the arrival of the goods, choose a safe material connection location, determine the number of distribution personnel according to the number of materials to minimize the gathering of personnel, and the staff should fill in personal information in the community to measure the temperature to facilitate the traceability of the problem. The community should determine the rest time after the first disinfection according to the type of goods, such as the rest time of frozen seafood or fresh vegetables. In case of tight transportation capacity, the community should set the order of material distribution and give priority to ensuring the supply of basic materials.

#### 3.3.3 The community shall develop a relevant convention system

As an autonomous organization, the community can formulate corresponding rules and regulations for targeted problems in the region. In order for group buying to continue to develop, the community must formulate relevant code conventions to institutionalize and standardize the content of community group buying. During the epidemic prevention and control in Shanghai, frictions inevitably occur in the process of group purchase. In this case, the "regiment leader" Yu Jie and the residents also have conflicts from time to time. In the mediation of disputes, the community must play the role of an intermediary and intervene in the contradiction in time. In case of economic disputes, the community should use relevant laws and regulations to protect the rights and interests of consumers and seek legal aid from relevant departments under certain circumstances.

#### 4. Conclusion

To sum up, the new profession of "head" is a new and powerful force in community governance. During the epidemic prevention and control period in Shanghai, the rapid rise of the "head of the regiment" and the super high economic activity drive the sound development of local social governance and community governance. Not only that, the emergence of the "head of delegation" in Shanghai has also demonstrated the great potential of social governance. In the grass-roots governance, the "head of delegation" has the advantages of youth, is more sensitive to market trends, attaches importance to the feedback of residents, integrates human and material resources in group buying to better serve the public, and improves the effectiveness of social governance.

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