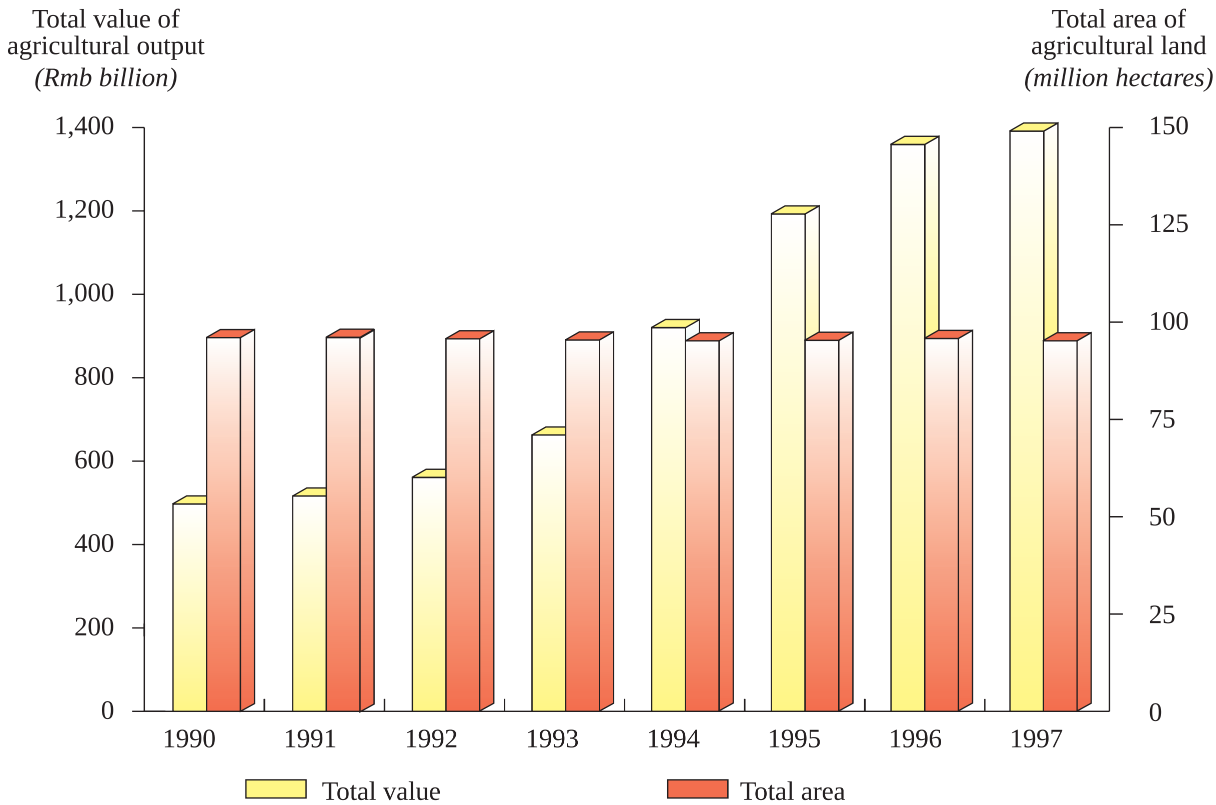
Information contained in this section has been extracted from official or unofficial publications, or has been obtained from discussions with relevant governmental or industrial bodies or organisations. The Company has not undertaken any independent verification of such information and accepts no responsibility for the accuracy of such information.

1. Background

In 1997, the population of China was approximately 1.24 billion, comprising approximately 21.2% of the world population. In contrast, China only had approximately 94.9 million hectares of agricultural land which accounted for approximately 7.2% of the total area of agricultural land in the world. In 1997, the agricultural output of China was approximately RMB1,386.7 billion, representing approximately 18.5% of its gross domestic product. While agriculture remains of significant importance in the PRC economy, there has been a continuous decrease in the area of agricultural land in the PRC in recent years. The total area of agricultural land in the PRC decreased from 95.7 million hectares to 94.9 million hectares during the period from 1990 to 1997, representing a decrease of approximately 0.8%. Notwithstanding such decrease in the total area of agricultural land, the total value of agricultural output increased by 179.9% over the same period. This has been achieved primarily through increased use of more modern agricultural machinery and equipment and the more widespread use of chemical and organic fertilisers. The following graph shows the agricultural output value as compared to the total agricultural land area of the PRC for the period from 1990 to 1997:



Sources: China Statistical Yearbook

From 1990 to 1997, the population of China increased by approximately 8.8% from 1.14 billion to 1.24 billion. It is forecasted to reach approximately 1.6 billion by 2030. Hence, in formulating its agricultural policies in recent years, the PRC government has placed strong emphasis on increasing agricultural output to keep pace with population growth.

In 中華人民共和國國民經濟和社會發展‘九五計劃’ (the ninth Five-year Plan of The People's Republic of China People's Economic and Social Development) and 2010 年遠景目標綱要 (the Target Proposal for the year 2010) approved by the Eighth National People's Congress in 1997, one of the targets laid down by the PRC government was for the total grain output of the PRC to reach 500 million tonnes by 2000. In the work report presented to the Eighth National People's Congress in 1997 by Mr. Li Peng, the then Premier of the State Council, agricultural development was stated as a top priority task to be pursued by the PRC government. In Mr. Li Peng's work report to the Ninth National People's Congress in 1998, the strengthening of agriculture as one of the foundation industries of the PRC economy and the stabilisation of grain output were listed as prior goals of the PRC government. Particular emphasis has been placed by the PRC government on the development of agricultural technology. 中共中央關於農業和農村工作若干重大問題的決定 (The Central Committee's Decision on Major Questions about Agriculture and Rural Work) issued at the meeting of the third plenary session of 中共中央十五屆三中全會 (the 15th Central Committee Party Congress) held in October 1998 stressed the importance of agricultural modernisation on the national economy and the top priority that should be given to the development of agricultural technology. In 當前優先發展的高技術產業重點領域指南 (the Guidelines on Preferred High Technology Industries for Immediate Development) jointly prepared by 國家發展計劃委員會 (the State Commission on Development and Planning) and the Ministry of Science and Technology in June 1999, technological modernisation in the agricultural industry was again stated as a top priority development area.

2. **Plant growth regulators**

Plant growth relies on external factors such as sunlight, water, air, nutrients and temperature. It is also affected by the activities and interaction of organic active substances that exist within the plant such as hormones, enzymes, nucleic acid and protein that constitute the micro-structure of the plant cells. The activities and interaction of such organic active substances have a direct effect on the process of division and elongation of the plant cells during the plant growth process.

PGR, in liquid or powder form, serves to influence or regulate the activities and interaction of such organic active substances during plant growth. By doing so, they improve both the quality and quantity of the plant (the quality in terms of the taste, colour, appearance and nutrition of the plant or its fruits and the quantity in terms of the size of the plant or the weight or quantity of its fruits). PGRs are applied in addition to (and not in place of) fertilisers. Compared with fertilisers, however, PGRs only have to be applied in minimal quantities. Hence, PGRs are particularly suited for use in agricultural environments such as China where there is a pressing need to maximise crop output and to improve crop quality with limited (or decreasing) arable land supply and other natural resources (such as water) and in the most cost effective manner. In "Agriculture in the 21st Century", an industry publication in the United States in 1983, PGRs were then already recommended as the agricultural technology for the 21st century. The publication recommended the extensive use of PGRs and that PGRs should be given priority in agricultural technology development.

Currently, two types of PGRs have been developed and are in use in the agricultural industry, namely, hormone-type PGRs and regulatory-type PGRs. These two types of PGRs function differently and produce different effects.

Hormone-type PGRs serve to provide additional growth hormones to, or to stimulate hormone activities and/or hormone production within, a plant, thereby increasing its quantity in terms of weight or size or improving its quality. Hormone-type PGRs can be divided into 6 major categories, namely, auxin, gibberellins, cytokinins, abscisic acid, ethylene and BR. Auxin was the first of them to be developed as a hormone-type PGR in 1934, while BR was the most recently developed in 1979. Hormone-type PGRs were widely used in the 1950s to 1970s. Auxin, for instance, was widely used in the cultivation of tomatoes in the 1950s, while ethylene was widely used in rubber production in the 1970s.

The main limitation of hormone-type PGRs is that each type of hormone-type PGRs only achieves one singular effect on a plant. Hence, the application of a specific type of hormone-type PGRs on a plant may increase the size of its fruits but is not capable of bringing about other improvements to the plant (as to, for instance, taste, colour or appearance of its fruits) at the same time. In some cases, the application of hormone-type PGRs may affect plant quality or have other side effects.

Regulatory-type PGRs serve to influence or regulate the activities and interaction of enzymes, nuclei acid, protein and other substances that constitute the micro-structure of plant cells, thereby bringing about an overall improvement effect on the plant, including increase in quantity, improvement to quality, as well as improvement to immunity to disease and tolerance to drought and adverse temperatures. Regulatory-type PGRs have been developed largely to overcome the limitations of hormone-type PGRs. In the 1970s, scientists identified polyamine for development into a new type of PGRs which has subsequently become generally known as regulatory-type PGRs. To date, five categories of polyamine have been discovered, namely, DCPTA, putrescine, cadaverine, spermine and agmatine. Of these, only DCPTA has, so far, been put to commercial production for agricultural use. DCPTA was discovered in 1987 by Henry Yokoyama of the Agricultural Research Services of the United States Department of Agriculture. DCPTA-based regulatory-type PGRs have been tested and shown to be capable of bringing about an overall improvement effect on plants, in contrast to the singular effect achieved by hormone-type PGRs. Experiments conducted in the United States have shown that DCPTA regulatory-type PGRs are capable of increasing crop yields by 20% to 280% and shortening flowering periods by 2 days to 10 months without any adverse effect on the quality of the plant or its fruits *(note 1)*.

Note 1: The information is extracted from Plant Biochemical Regulators, Harold W. Gausman, 1991. A total of 13 types of vegetables were tested, including sweet basil, carrot, turnip, spinach and tomatoes. A total of 13 types of flowers were tested, including carnation, chrysanthemum and tulip.

3. The plant growth regulators industry in the PRC

According to 福建省石油化學工業廳 (the Department of Petroleum and Chemical Industry of Fujian Province), there are currently more than 100 producers of hormone-type PGRs in the PRC, while the Group is the only producer of DCPTA-based regulatory-type PGRs. As shown by regulatory provisions and policy statements introduced or issued in the PRC in recent years, there is a growing tendency on the part of the PRC government to encourage the transition from the use of hormone-type PGRs to regulatory-type PGRs in the PRC agricultural industry.

In 1996, the then Ministry of Chemical Industry issued 關於加強農葯行業管理的有關規定 (the Regulations relating to the Strengthening of the Management of the Agricultural Chemical Industry). These regulations stipulate that to prevent wasting of capital resources, no approval or registration will be allowed in respect of agricultural chemicals which are ineffective, highly toxic, over-produced or technologically out-dated. The products for which no approval or registration would be allowed include various hormone-type PGRs, such as mepiquat chloride and paclobutrazol (both being absoisic acid based hormone-type PGRs), ethephon (an ethylene based hormone-type PGR) and gibberellic acid (a gibberellin based hormone-type PGR).

In '中國農業科學技術政策' 藍皮書 (the Blue Paper on Policies relating to Agricultural Science and Technology in the PRC) published in 1997 by 國家科學技術委員會 (the State Commission of Science and Technology), it was noted that PGRs represented only a very small portion of agricultural chemicals produced and used in the PRC notwithstanding their significant potential in improving crop output and quality when compared with traditional agricultural technology. The policy paper urged the full-scale development of PGRs as a new industry distinct from fertilisers and pesticides.

In 1998, 農業部全國農技推廣服務中心 (the National Agricultural Technology Promotion Service Centre of the Ministry of Agriculture) published 關於加大推廣超大植物生長劑的通知 (the Notice of Increasing the Promotion of "超大" Plant Growth Regulators) which was circulated to every 農技中心 (agricultural technology centre) throughout the PRC. The notice promoted the increased use of the Group's regulatory-type PGR products. The Group's products were also listed by the State Science and Technology Commission under '九五' 國家科技成果重點推廣計劃 (the National Priority Promotion Programme of Scientific Achievement of the ninth Five-year Plan).

In 1998, the United States had a population of approximately 256 million. The total area of its agricultural land was approximately 190 million hectares, accounting for nearly 0.8 hectare per capita which is about 10 times higher than the PRC. When compared to the United States, the PRC, faced with a fast-growing population and a limited supply of agricultural land, has a far more pressing need to maximise the agricultural output of per unit of productive land. As evidenced by its policies and statements in recent years, the PRC government has demonstrated a high degree of commitment to the modernisation of agricultural technology as the future direction for the development of the agricultural industry in the PRC. This, in the Directors' view, provides the Group with the most optimal environment and a unique opportunity to develop and realise the significant potential of its regulatory-type PGR business.