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**A NATIONAL PROGRAM OF  
STATISTICAL EDUCATION DEVELOPMENT  
1996-2000**

**State Statistical Bureau of China**

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## Introduction

Successful statistics lies on qualified personnel, and qualified personnel come from effective education. The National Statistical Conference in 1995, therefore, made a basic policy for the national development of statistics, which is expressed as "The first priority is science and technology; the second is legislation, and the most essential is qualified personnel." This is not only a great change of the strategy of the national statistical development, but also a basic guiding policy for the national statistical education. *The National Program of Statistical Education Development* has been made to conduct this policy, to enhance the development of statistical education and to make statistical education better serve the reform and modernization of Chinese statistics.

### I. Situation of Statistical Education

- (1) Since the Third Plenary Session of the 11th Central Committee of the Chinese Communist Party in 1979, statistical education in China has made great achievements. The reform of statistical education at universities has been carried out; the curriculum has been improved; education quality has been upgraded; the knowledge structure of students has changed a great deal; the teaching staff has increased; and statistical education started even from elementary and middle schools. Diversified training programs for statisticians have been launched, including programs for senior officials, statisticians, professional knowledge training, foreign language training, etc. Correspondence statistical education has made new development with different means employed and thus earned social credibility. The compilation of statistical textbooks has also made great progress. The introduction of foreign intellectual achievements has come to a new stage. The organization of statistical education has been improved. The policies regarding statistical education have been produced gradually. A framework of statistical education of various levels and different forms have been established including high education, elementary education, diploma education, knowledge updating education, professional education, and general education.

As we enjoy the great developments of statistical education, we need to recognize that the overall quality of education cannot meet the demands of the reform and modernization of statistics. The priority status of statistical education in statistical development strategy has not been fully realized. The problems which restrain statistical education from its development have not yet been studied and solved. The reform of university education of statistics need deepening because it cannot meet the needs of the training of highly qualified personnel. The training of statistical officials should be supported with corresponding policies and should be conducted in a more scientific and systematic way. Investment in statistical education is insufficient and the organization is incomplete. Training facilities are not enough and teaching staff is not stable. All these elements have influenced the further development of statistical education.

- (II) The reform and modernization of statistics have come into a key period. A historic change has taken place as a number of measures have been made including the implementation of the new system of national economic accounts, the establishment of the new survey system and the development of statistical informatics. The statistical reform and modernization have provided a great opportunity and motive force to the development of statistical education. Meanwhile, new challenges appear. The development of statistical education makes a more urgent demand for high quality, for highly intellectual support and proficient personnel than ever. In face of this situation, statistical officials at all levels and all the teaching staff should have the feelings of urgency and obligations for the development of statistical education. They should always keep in mind the policy of "The first priority is science and technology; the second is legislation, and the most essential is qualified personnel." All applicable actions should be brought into operation to open a new stage of statistical education.

## **II Development Objectives of Statistical Education in the Ninth Five-Year-Plan Period**

- (III) The general development objectives of the Chinese statistical education by the end of this century are to greatly increase the qualifications of reserved statistical human resources, to update knowledge structure and professional qualifications of the statisticians, and to establish a modern statistical education system with Chinese characteristics.
- (IV) To fulfil the objectives, the major tasks of the statistical education include:
1. To strengthen the publicity of statistics and increase the statistical knowledge of all citizens;
    - Continuing the experimentation and evaluation of statistical education in junior middle schools with optional courses. Till the end of the Ninth Five-Year-Plan period, it is expected that 10% of junior middle school students will select statistical courses.
    - Continuing the experimentation of statistical education with optional courses in high schools and vocational schools, Revising textbooks for those statistical courses and endeavouring to have the textbooks approved by the National Elementary and Middle School Textbooks Evaluation and Approval Commission.
    - Popularizing the knowledge of statistics and the statistics law among government officials and organizing statistical textbooks for those officials, and requesting statistical courses to be included in the curriculum of the teaching programs used by those officials.

2. To continue the reform of statistical education and to train qualified statisticians;
  - According to the needs of establishing a socialist market economy, evaluating statistical specialties, education objectives and curricula of the statistical faculties in all the universities, colleges and schools; proposing reform plans; and receiving advice and coordination from the National Statistical Education Association and the National Statistics Textbook Compilation and Evaluation Committee.
  - A evaluation indicator system for the quality of statistical professional education should be established. The purpose of evaluation is to improve education orientation, education methods and education approaches, and to increase the overall quality of statistical education.
  - Investments should be made in the training of teaching staff, especially young elite staff. Effective approaches should be explored to train new staff A new system should be developed to support and develop middle-aged and young teachers.
  - The two educational institutions under the direct leadership of the State Statistical Bureau should execute the general reform program and make endeavours to increase the quality of education and show their own features. Modifications of textbooks and curricular structure should be made on the basis of the modernization plans and should follow the development of modern science and technology. Focus should be put on how to establish analytic and independent working ability of students. The Xi'an Statistics College should upgrade its education and endeavour to improve the education of bachelor degree students. In the Ninth Five-Year-Plan period, it is expected to obtain the right to issue master degree certificates. The qualification of teaching staff should be brought into consideration. The teaching staff with master degrees should exceed 80% of the total staff. The Sichuan Statistics School should become one of the key national specialized schools and endeavour to become a specialized restitution of higher learning or a professional university.
  - The compilation and distribution of the magazine *Statistical Education* should be kept on. The quality of this magazine should be rectified and the circulation should increase.
3. To improve the professional qualifications of statisticians, especially of statistical officials;

- Standard professional knowledge of statisticians should be established. Various corresponding systems should be established and improved for training of statisticians in order to assure the incorporation of training of the civil service, government, professional entitlement examination, on-job professional training and follow-up education. The training of statisticians should step into a scientific, systematic and regular system.
- Seminars for directors of provincial statistical bureaus should be held on a continuous basis. It is necessary to include in the seminar each year at least one head from each provincial statistical bureau and each department of the State Statistical Bureau.
- The training courses of senior statisticians should be held once or twice a year with 30 participants each.
- Seminars for directors of prefectural statistical bureaus should be held once a year. Each class includes about 50 participants. The emphasis should be put on the training for new directors.
- Training for directors of local bureaus should be held in individual provinces. Staffing from 1996 on, the training of all those local directors shall be completed in three years. The present focus should be put on market economy theories, administration and management, new national economic accounting system, sample survey theories and practice, and computer techniques.
- In combination with civil service examination and professional proficiency examination, training for updating knowledge shall be held for professional technicians. The present focus shall be put on national economic accounting system and sample survey theories and methods. The forms of training can be diversified. A minimum duration for the training course should be 12 days for each person in one year.
- Great efforts shall be made to hold training in computer techniques and foreign language. By the end of the Ninth Five-Year-Plan period, over 90% of the SSB staff at and under 45 years shall have passed the second-level computer proficiency examination; over 60% of all kinds of professionals at and under 40 years shall have reached the sixth level of the English language. Provincial bureaus should work out their own objectives of the training programs so as to improve computer techniques and foreign language proficiency of all the statisticians. On this basis, SSB shall select a few outstanding professionals for intensive language training.

- SSB and provincial bureaus shall put great emphasis on the promotion and training of outstanding young professionals. During the Ninth Five-Year-Plan period, 100 young elite staff should be selected to form up a leading academic and professional group for the next century.
  - Under the guidance of the Statistics Law, the training of statisticians should be conducted throughout the country. The present emphasis should be on the knowledge of the Law and basic statistics. The organization of the training shall include the initiatives from the governmental statistical offices and from all the social aspects. By the end of the Ninth Five-Year-Plan period, 95 % of the personnel engaged in statistics should have obtained qualification certificates for their jobs.
4. To enlarge the function of correspondence education and adult degree education;
- In cooperation with the Central Party University and the Central Broadcasting and Television University, we shall continue the conducting of education of economic information management. It is expected that 10 thousand people will receive bachelor degrees and 20 thousand will receive two-year college certificates through this program.
  - In collaboration with the National Self-Learning Examination Committee, we shall continue the education of the accounting and statistical specialities. Efforts shall be made to open the education potential, recruit more students and let 20 thousand participants receive two-year college certificates.
  - New means for statistical correspondence education should be explored. This is especially important for the courses conducted by The National Statistical Television Correspondence College which is expected to recruit 800 students each year. By the end of the Ninth Five-Year-Plan period, 4 thousand students are expected to graduate from the college.
5. To update statistical textbooks and improve the quality;
- Efforts shall be made to improve college statistical textbooks. A number of 11 new textbooks shall be compiled for bachelor degree education and 3 new textbooks for vocational schools. 10 computer-assistant software packages shall be developed and 1 teaching video shall be produced.
  - The translation and publication shall be made of selected contemporary foreign statistics works. A first group of 14 books are planned to be translated and

published. One book in statistics will be copied for circulation. By the end of the Ninth Five-Year-Plan period, 20 outstanding statistical works are planned to be translated and published from foreign languages.

- Quality training manuals shall be compiled, which are suitable for the statistical modernization and for the needs of various kinds of training activities.
- Efforts shall be made to make quality evaluation of and recommendations on statistical textbooks. Prizes will be awarded to winners of the third national competition of excellent statistical textbooks.

6. To promote international cooperation and exchange on statistical education and introduction of foreign intellectual achievements;

- Cooperation with international education and training organizations shall be encouraged and a communication directory shall be maintained for international exchanges. It is necessary to let the world know the situation of Chinese statistical education.
- Cooperation with the National Foreign Expert Administration Bureau shall be taken for training activities in other countries. At least 4 training groups with about 100 participants will be sent abroad to receive training each year.
- UN assistance projects, multilateral and bilateral assistance, and assistance from the State Education Commission and State Science and Technology Commission shall be fully used to select, recommend and manage Chinese trainees in other countries.
- Foreign experts will be invited to give lectures in China.
- Cooperation and exchange shall be explored with international organizations and foreign national organizations in statistical education. New projects are encouraged and the establishment, execution and evaluation of such projects shall be well organized.

### III. Supporting Conditions

(V) The leadership over statistical education shall be strengthened.

- The development of statistical education as a priority program depends upon the chiefs of statistical offices at various levels. They should clearly realize the importance of education. Qualified personnel come from quality education. Therefore, improving

statistical education is a long-term and urgent strategic policy and should always be emphasized.

- The principal directors of statistics bureaus at various levels should supervise educational issues by themselves. They should receive frequent reports in statistical education and solve problems faced. A objective management responsibility system shall be set up. The training of statisticians, investment in statistical education and contributions to statistical education shall be included in the responsibility system and shall be regarded as important criteria to evaluate the achievements made by individual directors of statistical offices.

(VI) To establish and improve education institutions.

- Education institutions are the organizational basis of education. In the process of the present reform of government organizations, statistics bureaus at all levels should make emphasis on statistical education. The State Statistics Bureau plans to establish Statistical Education Center, which will be in charge of statistical education and will coordinate the management of statistical organizations at all levels in terms of statistical education. Local statistics bureaus should set up similar functional organizations.
- The establishment of a Statisticians College of the State Statistical Bureau is under preparation. It is designed to be the central educational organization under the direct leadership of the State Statistical Bureau. Its responsibilities will cover training of professional knowledge of statistics for the civil service system, the follow-up education and degree education; training of chiefs and senior professionals of statistical offices at and above prefectural levels; training projects entrusted by international organizations. If needed, provincial and local statistical bureaus may set up branch colleges for the training of their own staff.
- It is important for local statistical offices to appoint staff who are competent for their work in the education institutions and maintain their stability in the institutions. The directors of local statistical offices shall attach importance to the strengthening of statistical education in the fields of ideology, organization and education itself and shall continuously improve their professional and working ability. Those who are hardworking, creative and capable should be selected to assume higher responsibilities. They should have better training and appointment.

(VII) To increase financial resources for statistical education.

- To ensure financial resources for statistical education is both the basic conditions for the development of the education and prerequisite for the implementation of this program. The objectives of this program cannot be realized without sufficient inputs. Therefore,

we should realize that the inputs in education are a kind of strategic investments and shall be increased so as to ensure the successful completion of the objectives of this program. The training cost for those working with the governmental statistical system shall be covered by the statistical functional funds.

- It is necessary to strengthen the management of education funds. No organization nor person has the right to spend the funds on activities other than education.
- (VIII) The construction of training sites and facilities should be strengthened. All the statistical offices should take measures to improve physical sites of education. Financial resources shall be explored from various sources to supplement and replace computers, video tape recorders, television sets and other facilities. The audio-visual education networks shall continue their construction and make their full use in professional training, degree training and publicity.
- (IX) Studies and projections in statistical education shall be encouraged. At present, priority studies shall include the improvement of curricula and textbooks, requirements for statisticians, and knowledge that statisticians should have.
- (X) The National Statistical Education Association and the National Statistics Textbook Compilation and Evaluation Committee should provide advisory services in statistical education.