China Petroleum Statistical Investigation and its Reforms

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1. Introduction

As the development of China petroleum industry, petroleum statistical investigation, which grew out of nothing, has been gradually developed and constituted a scientific and complete system. It plays an important role in the E&P and production management of oil and gas, international cooperation, etc.

Data based on petroleum statistical investigation shows the way of the quick development of contemporary China’s petroleum industry:

Table 1.

<table>
<thead>
<tr>
<th>Period</th>
<th>Production (10,000 tons)</th>
<th>Staff (10,000)</th>
<th>Professional staff (10,000)</th>
<th>Import (10,000 tons)</th>
<th>Export (10,000 tons)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1904-48</td>
<td>278</td>
<td>1</td>
<td>5</td>
<td>2800</td>
<td></td>
</tr>
<tr>
<td>1948</td>
<td>9</td>
<td>1</td>
<td>0.07</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1978</td>
<td>10,000</td>
<td>100</td>
<td>5</td>
<td>69</td>
<td>1373</td>
</tr>
<tr>
<td>1997</td>
<td>16,000</td>
<td>150</td>
<td>41</td>
<td>5994</td>
<td>2668</td>
</tr>
</tbody>
</table>

2. Outline of China’s Petroleum Statistical Investigation

(1) The main tasks of petroleum statistical investigation are to collect raw data concerned with all kinds of petroleum economic activities, such as E&P, construction, production management, and data including resource, environment, finance, material, labor force, market, price, etc., which is related to petroleum production and construction.

(2) Objects of petroleum statistical investigation include (1) Units to be investigated ---- usually they are often statistic departments in companies, enterprises under CNPC. (2) Terms to be investigated ---- They include regular and systematic investigations into quantity and quality index of petroleum economic activities according to the main contents of statistical investigation. Also one times special or typical investigation for carrying out a specific analysis study and making decision, etc.

(3) Methods of petroleum statistical investigation include (a) Forms of investigation: usually including report forms system, general investigation, sampling investigation, typical investigation, focal investigation, etc. (b) Ways of collecting data: statistical forms, reports, paper media, magnetic media, e-mail on web, and on-site investigation, interview, registration, questionnaire, etc.

(4) Programming and quality control of petroleum statistical investigation (a) Investigation program: including investigation aim, investigation object, investigation range, investigation term, investigation form, report period, investigation form, investigation schedule, etc. (b) Quality control: including controls of data validation and accuracy.

3. Significant Reform of China Petroleum Statistical Investigation
When the People Republic of China was founded in 1949, its Petroleum Statistical Investigation system was established. The system is gradually developed from then on and goes through two stages. (1) From 1949 to 1978: using the experience of the former USSR, a preliminary system was established; consolidated and developed, the system was gradually suitable for the demands of petroleum industry under planned economic system. (2) Since 1978: as economic constructions were determined as the center of the economic development of the country as well as the petroleum industry, the petroleum statistical investigation has undergone a series of significant reforms.

1. Petroleum economy accounting system was established
In early 1990s, China national economy accounting system was transited from MPS to SNA. Petroleum statistical departments soon studied and established a new accounting system consisted of five elementary accounting forms, four implement forms and three analysis forms.

2. Reform of petroleum integrated statistical investigation system
To recognize that the scope of petroleum company’s main industry shows high biased distribution, an objective model of petroleum statistical investigation system, which is based on necessary annual comprehensive statistic forms investigation, makes full use of sampling investigation, especially of contents sampling, and is supplemented with integrated application of focal investigation, typical investigation and scientific deduction, is established.

3. Petroleum statistical investigation according to law, not administrative command

4. Statistics on the more open way and the range of its services widened
Since 198Os, a periodical announcement system of petroleum industry (enterprises) integrated economic benefit evaluation was established and is gradually improved revised.

5. Techniques of statistical investigation more modernized
Computers were applied to China petroleum statistical investigation in early 1980s. In the past 10 years or more, those individual and irrelevant report form applications under some specific software systems were used at the beginning, and now scientific, standard and uniform database system has being developed and information data is transmitted on web and automated. Therefore, it greatly shortens the period of data collection and analysis, and highly improves the data quality.

In a word, China petroleum statistical investigation system has been reformed and will be reformed further. There is an evident progress at an unprecedented rate in petroleum statistical investigation system, staff quality, investigation contents, investigation methods and algorithm, aiming at to catching up with the step of world trend of information socialization.

FRENCH RESUME

Au fur et à mesure que se développe l’industrie du pétrole de la Chine, le système de l’investigation statistique du pétrole s’est grandit à partir de zéro et devenu plus scientifique et compétent. Il joue un rôle important dans l’exploration et le développement de hydrocarbures, la gestion de la production du pétrole, et la coopération internationale. Le centre de la construction économique s’est déterminé avec le développement rapide du pays et de l’industrie du pétrole depuis vingt ans environ. Le système de l’investigation statistique dans l’industrie du pétrole ont connu des réformes importantes. Il s’est mue en système ouvert et oriente à la gestion des affaires pour l’économie marche à partir d’un systme ferme et orienté à la production pour l’économie planifiée.