

# **Marketing Management of A Water Resources Company**

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Abstract			
<p>Like all businesses, water resources companies need to be close to international market. Water's global strategic layout requires seeking new processing technology for the increasingly stringent environmental standards, on the one hand, and continuing to seek to expand the international market, on the other hand.</p> <p>However, at the same time in the search for market profits, water is the necessity of life for public welfare. Thus, the water enterprises need to find a profitable balance.</p> <p>Based on marketing theory, this thesis takes the Beijing Capital CO., LTD in Ma'anshan City as the case company, analyzes the status quo of marketing management of Water Company. This thesis analyzes as well the present situation of water resource company management, its development and improvement with a certain view.</p>			
Keywords water business; marketing; welfare enterprises			

## CONTENTS

1	INTRODUCTION .....	4
1.1	Background and purpose of the thesis.....	4
1.2	Definition of basic concepts.....	5
1.3	Content and structure .....	6
2	INFORMATION AND ANALYSIS.....	7
2.1	Information of company.....	7
2.2	Marketing model.....	7
2.3	Assessment indicators.....	8
2.4	Analysing of indicators and a related suggestion.....	9
2.4.1	Recycling rates .....	9
2.4.2	Production and sales rate.....	9
2.4.3	Water meter integrity rate .....	10
2.4.4	Comprehensive water price index .....	11
2.4.5	User satisfaction rate.....	11
3	Suggestions for strategies.....	13
3.1	Theory about marketing strategies of water industry .....	13
3.1.1	4P combination strategy .....	13
3.1.2	4C combination strategy .....	13
3.2	Strategy for future development .....	14
3.2.1	Public relations strategy.....	14
3.2.2	Quality service strategy .....	14
3.2.3	Market development strategy .....	15
3.2.4	Organizational strategy.....	16
3.2.5	Science and technological innovation strategy .....	17
3.3	Suggestions for customer and material management.....	18
3.3.1	Customer classification management .....	18
3.3.2	Implementation of water price laddering .....	18
3.3.3	Water meter reading management .....	19
4	Conclusion.....	20
	References .....	21

## 1 INTRODUCTION

### 1.1 Background and purpose of the thesis

Water is the resource our human race depends on, its importance is irreplaceable. However, in today's social development in China, with the destruction of the environment, water pollution is more and more serious phenomenon. Looking around the world, 1.6 billion people, or almost one quarter of the world's population, face economic water shortage. (UN Water 24/11/2014.)

Rapid economic growth has left a legacy of water pollution that the government is no longer ignoring. Chinese authorities are now determined to improve waste water effluent quality, sludge management, and drinking water quality. Environmental protection is regarded by the top levels of government as a driver of economic growth, rather than a limiting factor. Several important policies have been released since 2014 and the 13th Five Year Plan (2016–2020) has set ambitious targets for 2020 as well as increased support in public-private-partnerships (PPP). China is the top market in the world utility and industrial capex is \$ 52 billion in 2016 and set to increase to \$ 67 billion in 2020 (See Figure 1). There are huge opportunities for companies that can establish and develop the right partnerships with domestic players. (Global Overview and Industrial Markets.)

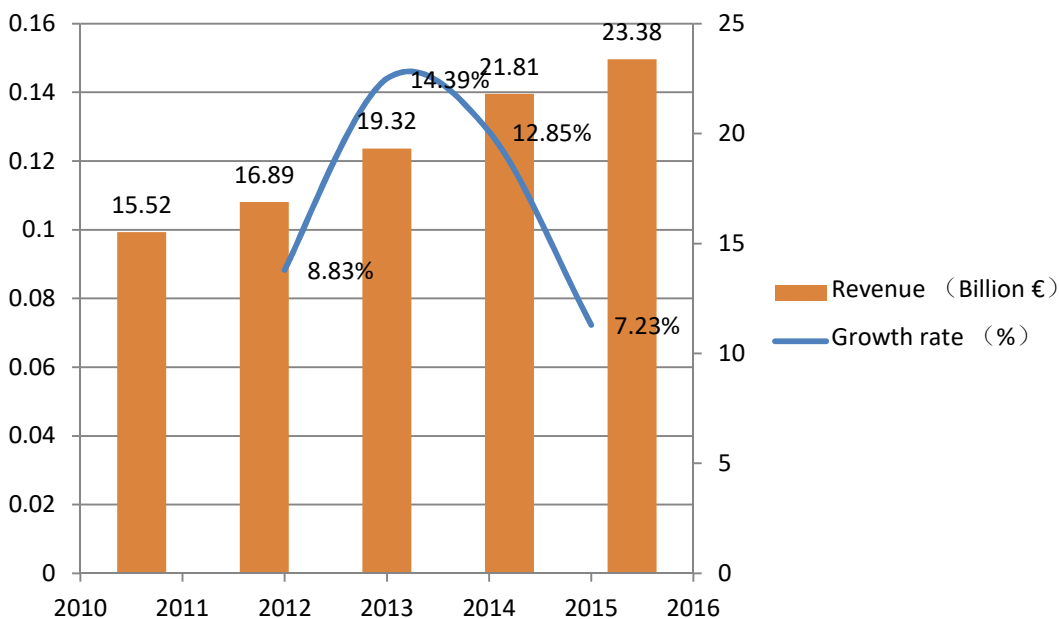


FIGURE 1. Sales statistics of China's water production and supply industry from 2011 to 2015 (China Business Information, 2016)

As a commodity, water resources are special, because they also have characteristics of social welfare. This also determines the water supply industry is a special industry. Having a view of China water supply market, the industry continues to intensify competition; on the other hand, consumer demand for water is changing. How to do marketing becomes an important issue in the water industry.

This thesis does the research by collecting information and choosing Beijing Capital CO., LTD in Ma'anshan as the research object. Through the horizontal and vertical comparative analysis of the advantages and disadvantages of marketing management, some improvements or forecast recommendations are made for the water business marketing management.

## 1.2 Definition of basic concepts

This thesis is for the Beijing Capital CO., LTD in Ma'anshan City, will elaborate on the company's water marketing management model. So first of all the concept of water marketing will be defined.

Water supply products include tap water, product production, transportation and sales within a network. Compared with the traditional manufacturing industry marketing, the strategies of water marketing combines product strategy, channel strategy and promotion strategy stay in one network system. Because of public welfare and the management of government, the marketing of water supply business and traditional marketing has clear specialty.

The responsibilities of marketing department in water supply business include: water meter reading and management, water charges for recycling, and customer visits and surveys and so on. It can be seen that the corporate image, service capability and customer satisfaction level of water supply enterprises are determined by the service capability and management level of marketing department. Therefore, developing and improving the marketing capacity of water supply marketing is the first task for water supply enterprises. The process of markets in water industries is in illustrated in Figure 2.



FIGURE 2. The process of markets in water industries

Water marketing means the water company meter reading and charges. It is the terminal of the water supply chain. This work has a direct impact on the production costs of water companies, the company's daily operations and profitability of the results.

### 1.3 Content and structure

This thesis analyses the marketing management model of the Beijing Capital CO., LTD in Ma'anshan City, and applies the relevant marketing theory to improve the marketing management mode of the company. The thesis analyses the main problems in marketing management, and give a suggestion for the problems. Then, the thesis uses the advanced management mode to improve the operational efficiency of water supply enterprises in order to ensure the development of water industry. This study is for Beijing Capital CO., LTD in Ma'anshan City to find the suitable marketing management model for their situation.

## 2 INFORMATION AND ANALYSIS

### 2.1 Information of company

This thesis chooses Beijing Capital CO., LTD as the case company and analyses its marketing management by the generation information collected from the company, a government report and related magazines, books and theses.

Beijing Capital CO., LTD is the only urban water supply company in Ma'anshan City, Anhui Province, which undertakes huge social responsibility and obligation. BEIJING CAPITAL CO., LTD pays attention in the field of water environmental investment and financing and operation management, not only in Ma'anshan, but also in 69 more cities in Beijing, Hunan, Shandong, Shanxi, Guangdong and other 18 provinces, autonomous regions and municipalities with a total population of over 40 million. Its services include water supplying, solid waste projects, water treatment with a capacity of nearly 20 million tons per day.

### 2.2 Marketing model

There are five factors involved in the process of marketing. The parts which belong to company include meter - reading workers, information system and accountant department. The other two parts are the part of customer and the part of service institution such as bank. These factors constitute the circle of the whole market process. The details of relationship can be seen in Figure 3.

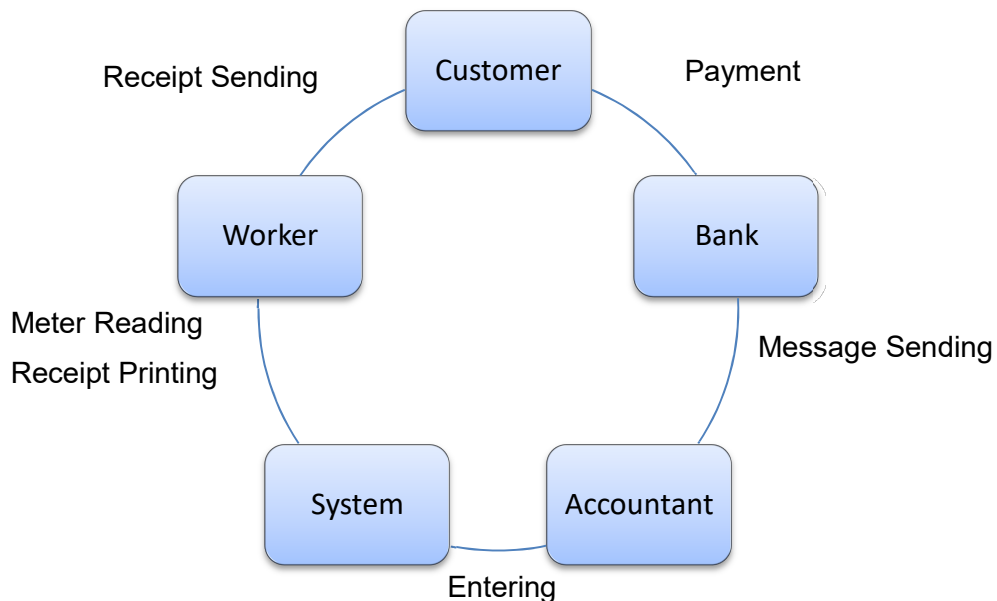


FIGURE 3. Water supply marketing model in Beijing Capital CO., LTD (Structure of Department 2016)

## 2.3 Assessment indicators

Water supply marketing assessment has six major indicators generally:

- Water sales
- Recycling rates
- Production and sales rate
- Comprehensive water price index
- Water meter integrity rate
- User satisfaction rate

Production and sales rate refers to the difference between the total water supply and the total water used by customers. It is the rate of total unpaid water, also called Non Revenue Water.

The meaning of this indicator reflects the input and output of the degree of deviation of water supply business, which reflects the enterprise management level, market awareness and competitiveness, but also indirectly reflects the efficiency of water use.

1. Production and sales rate =

$$(\text{water supply} - \text{water sales}) / (\text{water supply}) \times 100\%$$

2. Production and sales of water =

$$\text{Not charge of water} + \text{stolen water} + \text{loss of water} + \text{meter error}$$

3. No charge of water =

$$\text{Fire water} + \text{greening water} + \text{municipal water} + \text{company water consumption}$$

4. Stolen water =

$$\text{Users steal water} + \text{unregistered water} + \text{favour water}$$

5. Loss of water =

$$\text{Broken pipe} + \text{repair loss} + \text{water supply facilities leakage}$$

6. Water recovery =

$$(\text{Real charge}) / (\text{water charges payable})$$

7. Comprehensive water price index =

$$(\text{Water fee income}) / (\text{water supply})$$

8. Comprehensive water price index =

$$(\text{Water fee income}) / (\text{water supply})$$

9. Comprehensive index =

$$1 - (\text{total sales volume} \times \text{comprehensive water price}) / (\text{total purchase of water} \times \text{goal of The total purchase of water})$$

(Structure of Department 2016)



## 2.4 Analysing indicators and a related suggestion

### 2.4.1 Recycling rates

Due to the particularity of the water industry, and many historical problems and subjective and objective reasons, water recovery rate cannot be 100 %.

To improve the recycling rate, the company should strengthen the publicity and the execution. At the same time, clear the information water of unpaid water such as business collapse, a bankruptcy and arrears and special user groups' arrears.

Water supply is the economic lifeline of water supply enterprises. It is the survival and development of the first elements of the enterprise. Water supply enterprise decision-making, management and executive layer must pay high attention for working together. A marketing department takes the initiative to analyze the arrears, the reasons, and it takes effective measures to recover the arrears. If factories, enterprises and other units refuse to pay for water, it must stop the water supplying after the notification. At the same time, marketing department also needs to actively remind the factories and enterprises which have not paid.

### 2.4.2 Production and sales rate

There are four elements which have influence on the production and sales rate. These elements are pipe network leakage, measurement error and illegal water, as well as damaged facilities. The pipe network quality and operating conditions affect the water leakage rate directly. Under the new situation, the water supply enterprises need to invest in a certain amount of funds on new materials and technologies of the transformation of the pipe network to reduce the waste part of water and solve the water loss.

### 2.4.3 Water meter integrity rate

It is recommended that the organizers conduct annual water meter the user surveys on the area. It could relate to the damage or incorrect installation of meter, the change of environment around water supply channel and other accidents.

To keep the water meter integrity, the company focuses the main emphasis on two points. One is the quality of water meter installation, and the second is the timely reading feedback information.

The Water company design department and construction department manage strictly the design specifications, construction specifications, acceptance criteria and accountability system. The conditional water companies can also introduce supervision, from the source to ensure that the operating conditions of the water meter ensure the accuracy of measurement.

The staff of meter reading should be familiar with the state of the water meter and has the responsibility and obligation to feedback the water meter information:

- Make sure the reading is correct
- Make sure the water consumption is normal
- Make sure the water quality is correct

The staffs have the responsibility and obligation to let user know about the daily protection when using water. It is an assurance to avoid the meter from damage, burying or other effects on meter reading and it is also a good cooperation between a user and a company for the maintenance of the meter system.

Water companies should also pay more attention to the impact of the meter and arrange special funds to tighten the rectification. Water companies should establish a regular census system for water meters.

#### 2.4.4 Comprehensive water price index

The prices of water are different from their type. The water used for daily life is much cheaper than used for shop or industry. This phenomenon is common in the street room, the store room, the shampoo room and the high-grade bath, beauty salon and the garage.

For this phenomenon of using false kind of water, a water supply company must timely check the user's water quality and adjustment of water prices. The focus is on two tasks. The first task is about the user. The new user should confirm the information from the water supply company when apply for water supply. The typical example such as when relocating units in the relocation process, the user should carry the related documents to resettle the original arrears and clean up the pipeline, gate valves, fire hydrants and other water supply utilities.

The second part is about the related department of a water supply company. The marketing department inspection team should increase the frequency of inspection, issued timely to change the type of water, remind the information and adjust the water price. Mixed type of water should have sub-meter measurement, and not sub-meter metering of the high applicable water price

#### 2.4.5 User satisfaction rate

The marketing department is an important window of the water company. The contradiction between the user and the water company is mostly concerned with the water meter and water charges.

The figure below (Figure 4) shows the main performance of marketing department.

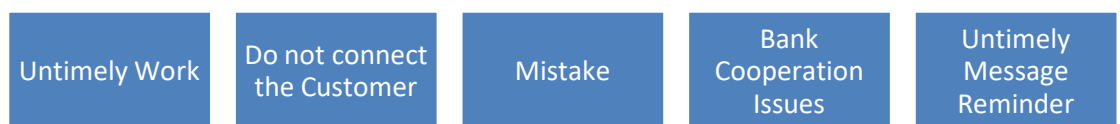


FIGURE 4. Problem of marketing process

The key to improve the external service image of the water division is to establish the service concept. Building the meter-meter reading system is one choice for the marketing department. This system makes sure the data of meter is correct and in time. It can also regulate the meter reading behaviour of the staff. Another choice is expanding the service area for customers that can make the process of payment quick and convenient. The fundamental problem is to solve the quality of the work of the marketing department, work standards, and how their duties are performed.

### 3 Suggestions for strategies

#### 3.1 Theory about marketing strategies of water industry

##### 3.1.1 4P combination strategy

4P combination strategy cares more in the inner part of company. It has four parts. The product part focuses on the development of the function. The product requires a unique selling point. The price part is based on corporate brand strategy. It makes different pricing strategies according to a different market positioning. The place part does not encourage enterprises face the consumer directly, but focuses on the cultivation of the dealer and the establishment of sales network. It believes business and consumer contact is carried out through the distributors. The last is the promotion part. It focuses on changes in sales behaviour to stimulate consumers and short-term behaviour to promote consumption growth. (William Perreault Jr., 2013.)

##### 3.1.2 4C combination strategy

The 4C combination strategy focuses more to customers, cost, convenience and communication. It emphasizes that the enterprise should put the pursuit of customer satisfaction first, followed by efforts to reduce the customer's purchase costs, and then to pay attention to the convenience of customers to buy the process, and finally consumer-centric implementation of effective marketing communication. It stands on the perspective of consumers to consider their needs more to determine the future of the enterprise. (Guining Song, 2005.)

## 3.2 Strategy for future development

### 3.2.1 Public relations strategy

Companies need to seek the support of government departments, cooperate with the government work actively, and strengthen the communication with the government and relevant departments. Meanwhile, the companies can establish a positive image and an influence by the creation of a harmonious local social environment through the sponsorship and support of various social activities.

In addition, the company should promote water supply to be safe and healthy by publishing water quality indicators of the water plant regularly. The public relations department should also keep close contact with government departments to increase inspection and punishment and do industry management with the competent government departments.

### 3.2.2 Quality service strategy

A company needs to win customers' satisfaction and reliance. It should pay attention to both quality and service parts at first.

To improve the quality, the company can build an automatic monitoring system of the water network by improving the technical content of the equipment, to ensure water quality and water supply reliability.

To improve the service, the company can set the related department to develop the water supply installation, maintenance and consultation. At the same time the company can also provide different products and services such as a relatively flexible pricing to supply different market customers. (Suping Wei.)

The improvement of service strategy can be divided into three parts.

The first part of service strategy is set for the existing industrial and commercial customers. The company provides one-stop service from design to construction maintenance, takes the initiative to provide customers with a reasonable and economical water supply program, to keep abreast of

changes in their water use, to give priority to meet their water needs and to do a good job of water demand side management for follow-up services.

The second part is set for residents living and non-resident water. In the water business process accident, the company builds the system of water inquiries, on-site repair water safety knowledge and so on to provide customers with quality and convenient services. After the transformation "One family - One meter", the company encourages customers to understand the water situation, consulting, and other work.

The last part is set for the customers who have special requirements for water quality. The company helps customers do the work, as far as possible to meet customer requirements for water quality. At the same time, the company should let customers have their own security measures.

### 3.2.3 Market development strategy

To improve the water supply market share, the water supply company can consider two things.

The company should build a close contact and a good communication with the government of the development zone to negotiate the establishment of different investment returns model to ensure that customers are in the region's water needs. (Suping Wei.)

The company should take timely measures such as the appropriate increase in bank water or property management on behalf of the management fee, in the case of policy permits to extend the water fee in the bank's residence time, etc. for a large number of residents and non-residents of water customers. Meanwhile, the company needs also to keep a harmonious relation with the bank and property management companies to build a convenience channel for customers to pay for water.

### 3.2.4 Organizational strategy

#### 3.2.4.1 Marketing agency

Service and marketing-based service agencies with clear responsibility can let the department works better. In addition to the original business, the water supply company should set the special water service sectors to deal with the requirement of customers, which can bring the convenience for users.

#### 3.2.4.2 Marketing system

The establishment of customer representative system norms can simplify the business management workflow. Through customer representatives and sales return visits, it can take the role of the bridge, to do a good job customer sales and after-sales service work.

#### 3.2.4.3 Marketing culture

On the one hand, the company functions are coordinated with each other from the customer point of view. Not only the marketing department, but also other departments should focus on the principles of customer service work. On the other hand, through internal marketing, the water supply company should increase publicity efforts to create a marketing atmosphere. The various staff should understand how their work is related to customers, training and encourage employees do better serve on the customer work.

#### 3.2.4.4 Marketing talent

Through the internal selection of training and external introduction and other forms of access, the company can achieve appropriate marketing talent for all types of talent in the technical, production, marketing and other positions and let them have the opportunities of learning to make it a deeper and deeper understanding of corporate marketing environment.



#### 3.2.4.5 Marketing mechanism

The establishment of marketing incentives and competition mechanism is a good guarantee for the implementation of a marketing strategy. The company will pay the total salary and job movements linked with the marketing performance and scientific objectives to strengthen the inspection. After the assessment, the enthusiasm of the staff will be improved by the management.

#### 3.2.5 Science and technological innovation strategy

Although the marketing department of technological innovation is the starting point for the user, the end is also the user. The most important method is the achievement of information management. In the new situation, the marketing department which establishes an integrated information management system is an inevitable trend. With the information management system, the company can clear the corresponding operating standards and make the report data and code standardized. Furthermore, the company needs to make the criterion of marketing management work procedures and business processes to ensure the seriousness, integrity and continuity of the data. At the same time, through the information management system, the company can achieve the intelligent query and it reminds the service to bring about the management of other water systems management information. Thus, the system will promote the level of company construction. (Snail Snoopy, Enterprise information management system, 04.09.2016.)

### 3.3 Suggestions for customer and material management

#### 3.3.1 Customer classification management

The criteria for customer classification are not unique, and the firm can determine the method of customer classification based on the level of information already in the customer's database and the need for self-management. According to the 20/80 principle, usually 80 % of the profits of enterprises from its 20 % of the larger demand for customers, it is named a large customer. In the ABC classification it is also known as the A class of customers. As the potential profit is relatively large, large customers become the key factor affecting the survival of enterprises, and they are the most strategic group of market competition.

The first step of a customer management is to select the elements of customer segmentation. Before the classification of all customers it must be first determined the classification criteria. It is not necessarily the size of the customer as the standard or the number of similar customers. For any water supply enterprises, the water is the most important production target, but it is also an important sales target. At the same time, water is the most important source of profits, so in the definition of large enterprises of water supply enterprises, the general choice of water and water charges are usually the most important considerations.

The second step is measuring the value of customers and to assess, segment and to identify large customers or key customers. Large customers usually have the following characteristics: the number of such customers is not large, but they bring the most value of the long-term development and profit for company. Enterprises to provide special services for such customers focus on resources to improve their satisfaction.

#### 3.3.2 Implementation of water price laddering

The normal needs of water must be ensured. However, the part of water beyond the normal need should also cost users more. The water price laddering is the method to expend the benefit and let customers to build the awareness of water resource protection.

According to the National Development and Reform Commission statistics, there are currently 661 cities in the country. Only less than 275 cities are implementing water prices laddering. City water prices, according to the type of water, is divided into residential water, non-resident water, and special industry water categories. The water supply company should do the implementation of ladder-type water prices for residential water use. The non-resident water and special industry water do the implementation of progressive increase. (National Development and Reform Commission, 11.03.2015)

### 3.3.3 Water meter reading management

Meter reading management is an important basic link in water supply marketing. Production and sales rate, water recovery rate and other assessment indicators are closely related to the direct impact on the economic efficiency of enterprises.

As a front-line staff, having direct contact with customers, meter reading staff should improve the enthusiasm of the work, and be aware of the importance of work. That is to adhere to the principle of work, but also have correct service attitude and improve service awareness.

In order to make the marketing model unified, while reducing the poor sales, the part of unpaid water causes the most part of loss of profits. Water management from the leak detection shift to the production and marketing control has gradually become a worldwide trend. However, due to economic conditions, technical means, the quality of personnel, as well as the level of management, this change is still in the exploratory stage.

Therefore, to have a profound analysis of the reasons for the formation of poor sales, the water supply company should also combine the status of production and sales control of domestic and other countries and regions in order to control the future development of production and marketing and to make the correct analysis and judgment.

#### 4 Conclusion

This thesis chooses Beijing Capital CO., LTD in Ma'anshan City to be as an example to analyse the marketing management of a water supply company. On the basis of the model, it gives the ideas for improvements for the company's marketing management.

The marketing management mode of water supply enterprises is closely related to the interests of enterprises. The research of this thesis has made some theoretical explorations on how to improve the efficiency of marketing management. This thesis puts forward the suggestions on the marketing management mode of the Beijing Capital CO., LTD in Ma'anshan City from the angle of the whole company to improve the marketing level.

As the view of the company, this thesis solves the current problems of the company, and makes recommendations and proposes solutions combined with the idea of corporate marketing strategy.

Because of the strong regional characteristics of the water supply enterprises, the water situation between the various regions may have some differences. Thus, the research conclusion based on the Beijing Capital CO., LTD in Ma'anshan City also can be applied to other water divisions needs.

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