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EFFECTIVE STRATEGY FOR AGRICULTURAL DEVELOPMENT: WITH REFERENCE TO KAUTILYA'S ARTHASHASTRA

SUNITA DEVI
RESEARCH SCHOLAR
DEPARTMENT OF ECONOMICS
KURUKSHETRA UNIVERSITY
KURUKSHETRA

ABSTRACT

Based on the famous Indian treatise on political economy, Kautilya's Arthashastra, the paper attempts to describe and explain the aspects of agriculture in ancient India. In this paper we shall examine the policies of the agricultural development as accomplished by Kautilya. And how these policies could be helpful in the agricultural development during modern times, it will also be checked.

KEYWORDS

Agriculture, Arthashastra, Kautilya.

INTRODUCTION

Agriculture plays an important role in the process of economic development of a country. Industrialization and agricultural development are complementary to each other. As a result, it was realized that the neglect of agriculture could limit economic growth. Agriculture depends on many factors, but the availability of cultivable land is the primary requisite. There are alternative uses of land. Land is also necessary for other purposes, e.g., habitation, forests, pasture grounds etc. Total available land in a country being limited, proper utilization of land, proper distribution of land among different uses, preservation of ecology of land etc. are essential for the sustainable development of agriculture and all other sectors of the economy of a country. In ancient times also, proper care was taken as regards the above matters. It may be argued that in ancient days agriculture was the main occupation of the people and so it acquired the utmost importance. By seeing our ancient texts it seems that in ancient India, agricultural techniques were the most modern. References have been made in these books to crops, intensive and extensive cultivation, small and large scale farming, the use of fertilizers, crop diseases and their eradication, irrigation, cattle farming, use of good quality seeds, evils of fragmentation of holdings etc. The ancient sages held that land revenue should form the biggest source of state income. It was the responsibility of state and community to convert the waste land into cultivable land. On the basis of ancient Indian text, Kautilya's *Arthashastra*, it will be examined in this paper how the matters related to agriculture were handled in the ancient India. In *Arthashastra* we get detailed guidelines regarding agriculture and proper utilization of land. This paper has been divided into five sections. First section is related to the introduction of the theme. The second section explains about Kautilya and his famous treatise *Arthashastra*. The third section analyses the agricultural views of Kautilya. The modern relevance of Kautilya's agricultural aspects is checked in the fourth section. The last section concludes the paper.

KAUTILYA AND HIS ARTHASHASTRA

Many oriental thinkers had contributed in the theoretical and practical field of agriculture prior to modern thinkers. The existence of earlier sources is clearly indicated in the Kautilya's *Arthashastra*. Kautilya's *Arthashastra* has a memorabilia place in the melting pot. It is a famous treatise of ancient India which was composed around 300 B.C. The author, Kautilya was also known as Chanakya and Vishnugupta. He was a great Brahmin scholar and a teacher of statecraft, which, in those days included economics, politics, war science, espionage and various aspects of religious and social life. The basic purpose of the book is to specify guidelines for unifying the innumerable states in the Indian subcontinent into a strong and large monarchic state capable of repulsing foreign invasion and ensuring free flow of goods and services throughout the subcontinent.

The treatise deals exhaustively with statecraft, economics, espionage, administration, war science, ecology and various other aspects pertaining to human living. It consists of 150 chapters, which are distributed among fifteen books. The books of *Arthashastra* are as follows:

1. Concerning Discipline
2. The Duties of Government Superintendents
3. Concerning Law
4. The Removal of Thorns
5. The Conduct of Countries
6. The Source of Sovereign States
7. The End of the Six-fold Policy
8. Concerning Vices and Calamities
9. The Work of an Invader
10. Relating to War
11. The Conduct of Corporations
12. Concerning a Powerful Enemy
13. Strategic Means to Capture a Fortress
14. Secret Means
15. The Plan of a Treatise

Although there are occasional insertions of prose, the treatise is written mainly in slokas. The "*Arthashastra*" consists of detailed analysis of different aspects of ancient Indian economy.

Kautilya was a great statesman as well as a great scholar. He played a dominating role in the formation and functioning of the Maurya Empire. Subsequently under his guidance, growth with stability was attained in the empire with the help of strong administration and efficient fiscal management.

Another book attributed to Kautilya is *Nitishastra* (also known as Chanakya Niti). It is a treatise on the ideal way of life, and shows Kautilya's deep study of the Indian way of life. He also developed Neeti-Sutras that tell people how they should behave. Of these well-known 455 sutras, about 216 refer to rajneeti. In fact, Kautilya used these sutras to groom Chandragupta and other selected disciplines in the art of ruling a kingdom.

AGRICULTURE ASPECTS IN KAUTILYA'S ARTHASHASTRA

The core subject of Kautilya's *Arthashastra* is Varta- Economics which is comprised by the three components-

1. Agriculture
2. Animal husbandry
3. Trade

To quote-

"Agriculture, breeding of cattle and trade comprise Varta". (1, 4, 1)

Among these three components Kautilya has given highest priority to agriculture. He says that agricultural development is the prerequisite for the overall development of an economy. There are various necessities which are accomplished by the agriculture which in turn promotes the development of other related sectors.

To quote-

"As such it is most useful that it brings grains, cattle, gold, other metals and forest produce in addition to free labour. With this one could gain control over one's own people as well as other people since they could support treasury and army." (1, 4, 1)

It is also cleared here that in ancient times major part of national income came from the agriculture sector. Agriculture sector was under the control of state. The decisions related to agriculture were taken by the Superintendent of Agriculture. He was named as *Sitadhayksha*. Kautilya prescribed various qualities which were essential to be the Superintendent of Agriculture:-

- He should be qualified in farm technology.
- He should have better understanding of soil characteristics and qualities, plants and tree, flower and fruits, and different crops.
- He should also have a good knowledge of *Krisitantra*- the Science of Agriculture, and *Sulvasastra*- Geology and Botany.

He was allowed to take the assistance of experts if he did not have the knowledge of all these fields. To quote-

"The Director of Agriculture, himself conversant with the practice of agriculture, water- dividing and the science of rearing plants, or assisted by experts in these, should collect in the proper seasons, seeds of all kinds of grains, flowers, fruits, vegetables, bulbous roots, creeper fruits, flax and cotton". (2, 24, 1)

This description clears that state used the services of experts in various sectors of production. All varieties of seeds were to be collected at proper time and preserved properly. *Sitadhayksha* was not only responsible for farming but at the same time he was also responsible for having good connection with carpenters, blacksmiths, rope makers and mechanics etc., who were helpful in cultivation by manufacturing farm equipments. It shows the interdependence among different sectors of the economy.

To quote-

"And he should cause no delay in (the work of) these on account of ploughing machines, implements and bullocks, and on account of (the work of) artisans, such as smiths, carpenters, basket- makers, rope- makers, snack- catchers and others". (2, 24, 3)

There was the active participation of the state in agricultural pursuits. How the land was distributed for different purposes like agriculture, pastures, factories, forests, water reservoirs and irrigation networks, habitats etc., was also the duty of state. There were the provisions of assistance and punishment according to the actions. Royal assistance was given to the persons who carried out proper methods of cultivation, taking care of sustaining the quality of the land. And there were the punitive measures for those who violate the rules in this regard. These are enumerated in various sutras as follows:-

He should grant (lands) to priests, preceptors, chaplains and Brahmins learned in Vedas (as) gifts to Brahmins, exempt from fines, with inheritance passing on to corresponding heirs". (2, 1, 7)

"He should grant lands to the heads of departments and others, and to gopas, sthanikas, elephant trainers, physicians, horse trainers and couriers, (lands) without the right of sale or mortgage".

It seems that they did not have the full ownership of land. They had the right of only use of land. They were not free to sale or mortgage it.

Kautilya prescribed state sponsored schemes for developing land for cultivation in the uncultivable areas i.e. tax concessions were provided to those persons who were willing to cultivate the uncultivated land. To quote-

"He should allot to tax payers arable fields for life". (2, 1, 8)

"Unarable fields should not be taken away from those who are making them arable". (2, 1, 9)

If any person leaves land given to him uncultivated, the state should promptly seize it gives it to some diligent cultivator.

"He should take away fields from those who do not till them and give them to others". (2, 1, 10)

"Or village servants and traders should till them". (2, 1, 12)

"And he should favour them with grains, cattle and money". (2, 1, 13)

"And he should grant to them favours and exemptions which would cause an increase in the treasury, (but) avoid such as would cause loss to the treasury". (2, 1, 15)

"On land unsuitable for agriculture, he should allot pastures for cattle". (2, 2, 1)

This shows the awareness of the state for making the proper land utilization which makes the country financially sound. It is also cleared that state favors the diligent cultivators which are a prerequisite for the development of agriculture.

According to him, the farming should be eco friendly and sustainable; and there should be a proper balance among different uses of scarce land. How various crops are to be cultivated is also described by Kautilya in detail. While planting crops appropriateness of soil, climatic conditions, availability of water and workers, seasons etc. should be kept in mind. It is mentioned in the following sutras:

"He should cause them to be shown in land, suitable for each, which has been ploughed many times, through serfs, labourers and persons paying of their fines by personal labour". (2, 24, 2)

It also shows the supply of workforce from additional sources if there is lack of agricultural labour.

"According to the amount of water (available) for the work, he should decide on wet crops, winter crops or summer crops". (2, 24, 19)

"In conformity with that (rain, sunshine and proper time), he should cause crops to be sown, requiring plenty of water or little water". (2, 24, 11)

Any delay in the timely sowing of seeds was punishable if there was loss of the harvest. To quote-

"And he should cause no delay in (the work of) these on account of ploughing machines, implements and bollocks, and on account of (the work of) artisans, such as smiths, carpenters, basket makers, snack catchers and others". (2, 24, 3)

Kautilya has given some valuable suggestions for the treatment of seeds to keep away them from crop diseases. He suggests that for getting good harvest sugarcane should be smeared at the cut with honey, ghee and pig's fat, and mixed with cow dung in the stalks before sowing. Thus, how seeds are to be prepared before sowing, and how crop saplings are to be properly maintained is described very clearly by him. To quote-

"soaking in dew (by night) and drying in the heat (by day) for seven days and nights (is the treatment) in the case of seeds of grains, for three days and nights or five in the case of seeds of pulses, smearing at the cut with honey, ghee and pig's fat, mixed with cow dung in the case of stalks that serve as seeds, (smearing) with honey and ghee in the case of bulbous roots, smearing with cow dung in the case of stone- like seeds, (and) in the case of trees, burning in the pit and fulfillment of the longing with cow bulbs and cow dung at the proper time". (2, 24, 24)

Kautilya says that all the harvested produce should be taken away carefully from the field and nothing should be left there, not even the outer covering of the grains.

On the basis of return and expenditure Kautilya divides the crops into three parts-

Best crops

Middling crops

Worst crops

He says that wheat and rice are the best crops, vegetables are middling and sugarcane is the worst because it requires more expenditure. To quote-

"*Sali* and others are the best crops, vegetables middling, sugarcane worst". (2, 24, 20)

"For sugarcane are fraught with many dangers and require much expenditure". (2, 24, 21)

Kautilya also prescribes measures for irrigation which are essential for the development of agriculture as like today. In ancient days also, rainfall was not regular and equally distributed over all reasons of the country. Agricultural pursuits in the dry and drought prone areas were dependent solely on irrigation water. In other areas too, irrigation was required during dry seasons. Because of this, Kautilya emphasized on the construction of –

- o Water reservoirs
- o Wells
- o Tanks
- o Fountains

And trees should be planted for soil and water conservation, esp. in dry areas. People undertaking these activities should be encouraged in various ways by the state. The state helped those, who voluntarily constructed reservoirs, by providing them with sites, roads, timber implements and other facilities. The state also encouraged cooperative adventures of villagers in constructing reservoirs for common benefit. If owners neglected maintenance of their reservoirs for five years or made no use of it, their ownership ceased.

MODERN RELEVANC OF KAUTILYA'S AGRICULTURAL ASPECTS

Kautilya suggested many important aspects in agriculture which are highly relevant today. Much emphasize is given on timely sowing which is very important for high yield for which, all the implements and other means have to be kept ready. Any delay in these arrangements received punitive action. The Superintendent of Agriculture should be an expert person who has the knowledge of agriculture. There was a provision to appoint a person who was not an expert but he was assisted by other knowledgeable person. There should be expectancy of labourers by land owners before sowing. The crops should be sown according to the season. Some of bio- control practices suggested by Kautilya have got relevance such as practice of exposing seeds to mist and heat for seven nights. These practices are followed even now in wheat to prevent smut diseases. Cut ends of sugarcane are plastered with the mixture of honey, ghee and cow dung. He also suggested that harvesting should be done at proper time. Nothing should be left in the field. The harvested produce should be properly processed and safely stored. The crop residues were also removed from fields and fed to cattle. Kautilya emphasized on organic farming which is done, in present days also, by the rural people of India.

CONCLUSION

In brief, it can be said that agriculture acquired utmost importance in kautilya's *Arthashastra*. It was the main pre- occupation of the people of a country. But during modern times, industry gains much importance and is considered the motivating force of an economy because it is free from the natural limitations of the agriculture. Still the importance of agriculture cannot be ignored altogether in a modern economy. Even today agriculture is the basic source of food for the people. It also supplies raw materials to many industries. Without a strong agricultural base, it is very difficult to develop industries of a country like India. So along with industry due importance should be given to agriculture and allied activities as suggested by Kautilya in his *Arthashastra*.

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