

## Opinion Article

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## New Stage of Agriculture Development, Agriculture High-Quality Development

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### ABSTRACT

Agricultural development has gone through a long process. There are different concepts of agriculture such as ecological agriculture, organic agriculture, smart agriculture and data agriculture and so on. After a review of literatures, the results showed that the direction of Agriculture development is Agriculture High-quality development. Agriculture High-quality development is that people take effective measures to get the maximum yield and benefit. Only in this way, land can produce more better and health food and service to meet the people's needs for a better life and safe food.

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### Introduction

Agricultural development has gone through a long process. Because primitive agriculture cannot produce more better and health food and service to meet the people's needs for a better life and crop types, yields and quality. There are different concepts of agriculture such as ecological agriculture, organic agriculture smart agriculture and data agriculture and so on. Organic agricultural practices respond to and offer alternatives to the health and environmental problems related to conventional technologies and practices of production and embrace many alternative ideals such as alternative distribution and retailing networks and the counter-cultural wholefoods movement [1,2].

According to the efficiency of resource utilization by plants, the whole process of agricultural development can be divided into three stages: Low level development stage or primitive agriculture, Level improvement stage and high-quality development new stage.

At Low level development stage or primitive agriculture, people pick up wild fruits and rely on nature for a living because science and technology are underdevelopment and people labor productivity are low. Now, there are some areas to continue to carry out this kind Agriculture. For example, in China or over the world, there are still some primitive tribes.

At the Level improvement stage, people start to select or cultivate better plant species, weeding, producing and applying fertilizer and irrigating, if there are water resources, to increase food kinds, improving quality and amount of food. The turning point from the low level of development to the level of improvement is plant domestication and animal introduction domestication, the development of gathering economy to planting economy, and high-quality development new stage. At the high-quality development

new stage, people take effective measures to get the maximum yield and benefit. The turning point from the level of improvement to high-quality development new stage is the overapplication of chemical fertilizer and the overuse of pesticides in the production process, which is not ensure agriculture high yield and benefit but easily cause environment and healthy problem.

Because the indicator plant in original vegetation is dominate species, especially constructive species, the uppermost dominant species, which is native to the local region because for a long time they have developed a good relationship with the local condition, plant resources relationship is very harmony and plant grow well and bear fruit but the goods and service cannot meet people's need, a lot of original vegetation has been changed into non-native plantation such as Saskatoon berries in the semiarid region, China, they grow and develop well, suitable for local climate, easy to develop. But another plant, such as corn and red plum apricot, they are not suited to the local climate and need to regulate plant resource relationships. So, to carry out sustainable use of natural resources and Agriculture high quality production, we must use the natural resources in sustainable way. To achieve this goal, we must take the theories of resources use limit by plants, vegetation carrying capacity and the critical period of plant resources relation regulation as a guild, select excellent tree species or varieties, take appropriate initial plant density and take effective measures to ensure plant grow well and get the cultivated goal, maximum yield and beneficial. If there are plants that are overusing natural resources because the plant density exceeds the vegetation capacity or underuse natural resources, the plant resources relation should be regulated by the vegetation carrying capacity, especially the vegetation carrying capacity in the critical period of plant resources relation regulation. If available natural resources in crown or root are smaller than the natural resources use limit by plants, the plant

resources relationship enters the critical period of plant resources relation regulation, and the ending time of the critical period of plant resources relation regulation is the ineffective time of plant resources relation regulation. The vegetation carrying capacity is the ability of nature resources to carry vegetation, and soil water vegetation carrying capacity is the ability of nature resources to carry vegetation, which changes with plant species, times and location [3,4]. We should select better species or varieties, take suitable initially planting density and effective measures, such as weeding if weed influence the plant grow, fertilizing, the fertilizing amount is smaller than and equal suitable fertilizing amount, and irrigation (if there are water resources and irrigation amount is smaller than and equal to suitable irrigation amount) to ensure plant growth well in the process of production and get the cultivated goal, maximum yield and effect. If the plant density in the critical period of plant resources relation regulation is more than the vegetation carrying capacity, showing that the plant resources relationship should be regulated, otherwise the further increase plant use natural resources will lead overuse of natural resources because available natural resources is more than natural resources used by plant, which will lead to the decline of vegetation and the decline of grain yield and quality [3-11].

Because of the large agricultural area and the increasing population, which has exceeded 8 billion at present, different regions have different climate, and crops suitable for growth, climate change with time, so it is necessary to strengthen the research on the selection of excellent plant species or varieties, determination appropriate initial plant density, resources use limit by plants, vegetation carrying capacity, the critical period of plant resources relation regulation to get maximum yield and service and realize agricultural high-quality development and meet people's needs for a better life and safe food [12-40].

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#### Competing Financial Interests Statement

There are no competing financial interests

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