

# Investigation of the Pattern of Agriculture Production in Henan Province (PRC)

Jie Lu

*The Rural Socio-economic Survey Organization of Statistical Bureau of Henan Province*  
No.79 Hong Zhuan Road  
Zheng Zhou, China  
Email: hnzyp@371.net

Yuping Zhang

*The Rural Socio-economic Survey Organization of Statistical Bureau of Henan Province*  
No.79 Hong Zhuan Road  
Zheng Zhou, China  
Email: hnzyp@371.net

Since the reformation and opening, the pattern of agriculture production in Henan province has been adjusted drastically, but comparing with the faster diversification of the market, the pattern of agriculture production lags behind comparably. Thus on the basis of the input and output research data, the adjusting pattern of agriculture production in Henan province has been analyzed, and the corresponding steps have been brought out in order to promote the deeper optimization of the pattern of agriculture production.

In order to reflect the structure statues between the departments of the national economy and the agriculture, the situations of the structure adjustment in agriculture itself and the concerning problems, the quantitative analysis about the input and output format adapted by the henna statistic bureau is put forward as follows:

## 1. the induction coefficient (E) and its variance analysis ( $\delta$ )

The meaning of the induction coefficient (E) is, while the average final product is accrued by others departments of national economy, the demand for the Ith department to increase its final sum. If E is beyond 1, the Ith department is more sensible for the final product increasing, or the Ith department should enhance its product to meet this need. The economic meaning of the induction coefficient (E) variance ( $\delta$ ) is, while one unit of the final product of others departments of the national economy is increased, the symmetrical degree of the Ith department dispatching its middle product. The analysis shows the relations between agriculture and other departments and the movement of the industrial adjustment. It is told from the reports that, in six departments, the induction coefficient (E) is the biggest while the variance is the lowest. This indicates that the input analysis otherwise arising from industry on departments of national economy is very little, and in hence reveals the importance and universality of the industry to the development of the national economy. In compared with the industry, agriculture elevates from the third place of 1992 to the second place, and the number is somewhat rising, which cannot be discriminated from the fact that Henan is a agriculture dominated province and holds a crucial statue in national economy. At the same time, the situation of the third industry is enhanced gradually, and its function is enlarged too. The further analysis of the pattern of agriculture production itself indicates, with the development of the national economy, compared with other sections in agriculture, the plantation offers the most sums of products, and the foodstuff is the dominant factor in the national economy growth. The second is forestry and stockbreeding, fishery hold a relative underdeveloped situation. Until 1997, the adjustments of the sections in agriculture affect complexly on all sections except the plantation. On one hand, the induction coefficient of the plantation decreases from 0.2495 in 1992 to 0.2199 in 1997, with the dropping percentage being 12%. But on the other hand, the induction coefficient of the forestry ascends from 0.17 to 0.1936 with 14% of elevating rate, and the induction coefficient of the Stockbreeding rises from 0.1599 to 0.1726 with 8% of rising rate. The differences between the three sections are

becoming less by less. All in all, during the five-year modulation, the forestry and the stockbreeding develop drastically, which affect the national economy greatly.

## **2. Influencing coefficient (F) and its variance ( $\delta$ )**

When final production of the Jth department is attained, production demanding degree for others department is influenced. The influencing coefficient (F) indicates such an influencing degree for other departments' production demanding. So, it is apparent that the bigger the E value, the heavier the force on other department. By 1997, the value of influencing coefficient E of Henan agriculture has developed from 0.288 to 0.3171.

While with the more science and technology applying in the agriculture, the influencing coefficient variance is increased accordingly, so the need of the asymmetry of the cooperative section is enlarged. Thus the selectivity is somewhat increased. The further analysis of the pattern of the agriculture shows that in the agriculture, the influencing coefficient of stockbreeding is the maximal, which indicates that when the stockbreeding gains its unit product, the input of the cooperative section is needed to add. This is indivisible with the special qualities of the production of the stockbreeding. At the initial product of the stockbreeding, a lot of food is needed from planting; at the process of sub-output, meat-processing factory, leather-processing factory, and manufacturing-factory are needed suitably. Compared with this, planting and forestry stand in a relative backward situation, which are connected with the traits, which the production of agriculture is inter-woven with natural reproduction and economic reproduction. With the close relationship with our daily life and its higher induction coefficient, the forestry has a high influencing coefficient, still higher than that of the fishery. The variances of influencing coefficient of the planting, the stockbreeding, and the forestry are the big. This shows that with the development of these branches and the application of high-tech, the input asymmetries in the sections are increasing heavier. But the variance value of the fishery is small accordingly, which indicates that its development is still in a comparatively lower level.