

# **Die limitierenden Faktoren der landwirtschaftlichen Betriebsvergrößerung - dargestellt am Beispiel Taiwan -**

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# **The Limiting Factors of Farm-Enlargement - the Taiwanese Example -**

**Summary by Wolfgang Mertz**

This Master Thesis is an attempt to elaborate the limiting factors of the expansion of farmsize in the Republic of China on Taiwan, resulting from the discussed reasons for farm-enlargement at the beginning, followed by some concepts of solutions for this problem.

In an agricultural-based economy, like Taiwan in the 1950s and 60s, when labour was easy available and cheaper compared to the use of machinery, alternative possibilities for occupation were rare, a small-scale farmstructure in a densely populated area was appropriate to prevent unemployment and to support the production intensity. To reach the aim of developing a country into an industrial and service economy for raising the welfare, it calls for freely disposable labour and capital. Due to the increasing productivity as a result of the technical and biological progress in this sector labour could be provided for the other sectors and the self-sufficiency could be guaranteed also for non-farming families.

Before the accession to political power of the Kuomintang on Taiwan, 55.88 per cent of the cultivated land was cultivated by its owners, the rest was leased. The rent was up to 70 per cent of the gross production. With the „37.5 per cent Rent Reduction Program“, carried out in 1949, the maximum rent rate was limited and thus not only the income of farm families could be raised, but also the encouragement for raising the total food production.

In the course of the sale of public farm land (1952) and the „land to the tiller program“ (1953), whereby at the latter the non-selfcultivated land exceeding a maximum bound has been expropriated and offered to the tiller for sale, the interest to increase the production especially for the market was further stimulated and enhanced. In the following years the production could be intensified so that the yields per ha heightened from 1.998 kg/ha (1952) to 4.655 kg/ha (1993). So the aim

of self-sufficiency could easily be achieved as well as an almost proportionate distribution of income. This latter fact led to a raising savings rate which mobilized Taiwan's economy. So it might sound grotesque that the structure that was conducive to the development of the Taiwanese economy in the past now effects the opposite

The average land property, depending on the change of farm-families through inheritance, varies from 1.29 ha (1952) to 1.06 ha (1993). (The exact farmsize is not reported in the statistics.) In the 1950s the possible income from such a property was enough to feed a family and to earn a reasonable salary comparable to wages of industrial workers. But the conditions have totally changed. As time went by the disparity of income between the farm and non-farm families diverged. Although the farmers raised their income by extra-farming work, it amounts only to 70 per cent of a non-farm household. Consequently the number of full-time farm households was reduced from 49.3 per cent (1960) over 31.2 per cent (1970) and 9.0 per cent (1980) to 13.0 per cent (1990) and the portion within the part-time farm households, that regard agriculture as their sideline occupation changed from 19.8 per cent of 50.7 per cent (1960) to 69.8 per cent of 87.0 per cent (1990).

A farm-enlargement can be attended with reduced production costs per unit. Thus the profit per unit rises. This profit multiplied with the higher production scope makes an adequate income for a full-time farmer feasible. The reasons for this are economies of scope by using cheaper producing technology more than economies of scale, that emerge when nonvariable costs are covered by a higher production output. Additional advantages are better know-how through more practice as well as possible discounts which are granted for larger purchases of means of production. On the other hand the expansion of the farm-scale can also cause disadvantages. These are increasing internal transportation costs, higher management costs, due to more organization and control work and higher rent rates. The reason for the latter phenomenon is simple: Struggling farms would have to give up (lease) more profitable or better located land. The willingness to do so is related with higher rent rates. Another argument against farm-enlargement might be higher costs for hygiene

and, depending on the fiscal situation, the loss of tax exemptions or tax-favoured production conditions and subventions.

In the German agriculture so far the advantages have preponderated. Hence there is a trend to expansion. In Taiwan the legal situation and the agricultural policy among several other reasons hindered and still hinders the groundmobility until today and so the farm structure could not modify to large-scale. The main reason is the fear of a new agrarian reform connected with a second expropriation. The statutory basis is manifested in the article 33 of the Land Act, saying that a tenant who cultivated a parcel over a period of more than 8 years has the right to apply for the purchase of plot of land. Another main reason is the Lease Act with its maximum rent rate of 37,5 per cent of the yield which refers to the level of 1949 and its restrictive dismissal protection with some clauses like the compensation duties. Although there exists a new form of tenancy called entrusted farming, which is defined in the Agricultural Development Act as not to be subject to the provisions of the 37.5 per cent Farm Rent Reduction Act, there remains a scepticism in the head of farmers. The low or partially not imposed land taxes are not instrumental to a better allocation of land. The subventions also allow the landowners to receive a profit without doing anything on the field but using custom work instead.

The fact, that landowners want to preserve their asset is mainly a consequence of speculation. Taiwan is one of the most densely populated areas of the world. The population density raised from 226 per square kilometers in 1952 to 582 in 1993. The growth of the population entailed a higher demand of land for settlement and so the prices for land have reached excessive levels. The difference between the official estimates and the real market prices are enormous. In case of a sale, the lessor would have to pay a high compensation to the tenant.

For the sake of completeness there should also be mentioned the lack of old-age pension and that ancestors are buried on their land supporting this cautiousness.

But there are also reasons which deter farmers from leasing. While the lessor is interested in a short term of lease, it is the opposite for the tenant. A compromise is hard to find. The parcel structure and its dispersion by ownership does not allow a

utilization of modern machinery. A simple solution of voluntary land change is difficult due to a lack of confidence in the old land estimations that originate from the Japanese occupation and have not been adjusted to the present status. The realization of a soil consolidation became a victim of the partition of an estate. If the Farmer Associations would try to get the land-owners of parcels that are connected together to a round table and so to find groups of lessors leasing their land to one farmer, could be an idea for a project.

As long as there is no intention on the side of the Taiwanese administration to clear away the statutory obstacles and to get speculation under control and so to pave the way for a well functioning tenancy system, there will be no development of a large-scale farm structure that is able to compete on the world market. The governors confidently look forward with optimism and self-assurance : „The Taiwanese rice is unique in its taste“ and so „the rice will still find its market despite of a higher price“.

It is actually not predictable, when Taiwan will become a member of the World Trade Organization (WTO) and join the GATT, but that is supposed to be a question of time.

For this event Taiwan should be well prepared and regard this conviction of the governors with scepticism. When the Kuomintang (KMT) moved their residence to Taiwan in the late 40s there was political and ideological driving force for economical development and social welfare. The government seemed to be independent and determined. Today more individual interests are placing themselves on the foreground. In the „Comprehensive Agricultural Adapting Program for 1991 to 1997“ shows, besides the the requirement of old-age pension and direct payments, also the liberalization of the tenancy system, but until now nothing has changed and no signs of this are to be seen.

Now the destiny of the Taiwanese Agriculture lies in the devoted hands of the Taiwanese legislation. Essentially it depends on their willingness for reforms to lead Taiwan into a country with a potential for an international competitive agricultural production.