Where Do Man's Knowledge and Talent Come From?

by the Revolutionary Committee of the Chingchiang Sugar-Refinery

WHERE do man's knowledge and talent come from? Marxists and opportunists have entirely different answers to this question. Marxists hold that man's knowledge and talent originate in practice. This is the materialist theory of reflection. Contrary to this, Liu Shao-chi and other swindlers allege that man's knowledge and talent are "endowed by nature." This is idealist apriorism. Working together with the local peasants, we workers and cadres of the Chingchiang Sugar-Refinery in Kiangsu Province have succeeded in growing sugar-beets on large tracts of land in the Huai-yin area near the Hungtse Lake. This once again proves the correctness of the materialist theory of reflection and declares the bankruptcy of idealist apriorism.

Before liberation, China's sugar-making industry depended on either beet from the northernmost areas or sugar-cane from the southernmost parts. No sugar-producing crops had ever been grown in central China, a vast area south of the Great Wall and north of the Yangtze River. In the 1930s, sugar-refineries were set up in Shantung Province's Tsinan, Hopei's Shihchia-chuang and Honan's Chengchow by German and Japanese capitalists. They tried but failed to grow sugar-beet in these areas, which were thereafter considered no good for beet.

To make Kiangsu a sugar-making province, the people of the Huaiyin area relied on their own efforts to grow beet and built a sugar refinery in 1958. In the first two years, they mechanically followed the method of spring sowing used in northeast China. The result was by August — the hot rainy month — the beets became so leafy that they covered up all the space between the rows. Poor ventilation which ensued gave rise to phoma leaf spot and many stems and leaves rotted. Hence the exceedingly low yields. Citing some data, a few bourgeois "authorities" in 1962 asserted that beet could not be planted in Huaiyin because of the high temperature and heavy rainfall. So we had to close our newly built refinery, leaving only 13 cadres and workers to look after the machines and other equipment.

Can Sugar-Beet Grow in Central Ching?

Is the Huaiyin area really unsuitable for beets? The cadres and workers who remained in the refinery pondered this question over and over again. Chairman Mao pointed out: "Whoever wants to know a thing has no way of doing so except by coming into contact with it, that is, by living (practising) in its environ-They joined the local peasants to carry out experiments; they tried, first of all, to find out the best time for sowing. From April 1 to September 1 they sowed once every fortnight, carefully observing and recording the growth of beets. They found that beets sown in April and May failed to give the desired result, while those sown after mid-June grew leafy in September when the weather, unlike that of hot August, had turned cool, while the danger of plant diseases was greatly reduced. Having thus prevented the leaves from rotting, the upshot was a notable rise in yields. Beets sown after mid-July, though less liable to diseases, gave lower yields because of the short period of growth. Experiments proved that sowing in summer instead of spring was a key measure for successfully growing beets in central China.

The question of whether or not beets can grow in the Huaiyin area was solved, but how can they grow well? At first we thought that with the growing period correspondingly shortened as a result of summer sowing, it was imperative to stimulate their growth in order to raise output. So we lost no time in top-dressing and weeding coupled with meticulous field management shortly after the seeds sprouted. But contrary to our expectations, abundant growth of the leaves led to rotting during the hot season, and yields were thus adversely affected. Some other production teams, however, got high yields of beets top-dressed at a later instead of at an earlier period when they were busy with the other crops.

What was the reason? "If a man wants to succeed in his work, that is, to achieve the anticipated results, he must bring his ideas into correspondence with the laws of the objective external world." Continuous practice while studying relevant agricultural data and making scientific analyses enabled us to understand the peculiarities of the growth of beets: Higher average air temperature than average soil temperature is favourable to the growth of stems and leaves, while the other way round is favourable to the growth of taproots. Excessive growth of stems and leaves which

(Continued on p. 19.)

(Continued from p. 17.)

absorb most of the fertilizer will adversely affect the growth of tap-roots. It follows from this that the growth of stems and leaves should be properly controlled and no top-dressing applied in the early days of sprouting because summer air temperature is higher than soil temperature in the Huaiyin area. When soil temperature there becomes higher from early September on, top-dressing must be given in good time to stimulate the growth of tap-roots. Repeatedly testing in practice the laws we discovered, we have worked out a series of measures for field management which help handle well the dialectical relationship between the growth of stems and leaves on the one hand and that of tap-roots on the other, thereby increasing beet output.

New Contradiction

"The ceaseless emergence and ceaseless resolution of contradictions is the dialectical law of the development of things." After the question of growing beets well in the Huaivin area had been solved, a new contradiction cropped up — that of beets and food crops competing for land. Eager as they were to increase the output of food crops, the commune members found that those sown to the land where beets had just been harvested yielded less due to reduced fertility. Going in for beet production at the expense of food crops would be running counter to Chairman Mao's principle of "taking grain as the key link and ensuring an allround development." Beets and food crops are a unity of opposites in agricultural production. "In given conditions, each of the two opposing aspects of a contradiction invariably transforms itself into its opposite as a result of the struggle between them." We must create the necessary conditions for the transformation of the opposing aspects. Drawing on the experience of raising output by intercropping sweet potatoes with a kind of winter plant used as green manure, the peasants proposed intercropping beets with that plant. Experiments were carried out in 1968 and the result was very encouraging. Popularization of this method throughout the Huaiyin area increased the yield of food crops sown after the beet harvest 20-30 per cent. The contradiction between beets and food crops was thus solved satisfactorily through practice.

Continuous Exploration

In the course of growing beets, we also successfully worked out a new method of growing beet seeds. The old practice was to keep the tap-roots in cellars during the winter and plant them the next spring; seeds produced later that year were used for sowing in the third year. This was a lengthy process, and much land and manpower were wasted.

Chairman Mao has taught us that "we must always remember Lenin's words, the concrete analysis of concrete conditions." Enlightened by instances of rape and other crops which bear seeds the second year after going through the winter, we carried out successful experiments on growing beet seeds in the open in winter (i.e., leave the beets in the fields in winter so that earlier next year they can bear seeds which are used the same year). Several years' efforts have produced a new strain of beet suitable to local conditions. We are now more than self-sufficient in beet seeds. Gone are the days when we had to get them elsewhere.

Chairman Mao has taught us: "The movement of change in the world of objective reality is never-ending and so is man's cognition of truth through practice." We have gained some understanding of the laws governing the growth of beets, but there are still many unknown "realms of necessity." We must make continued efforts to open up roads to the knowledge of truth through practice and work hard to raise beet output.