THE BANGLADESH OBSERVER

Jakarta Upgrades Vocational Schools

—Warief Djajanto

YOGYAKARTA— Wanted immediately. A fast-growing private industrial group with plants around Jakarta and South Sumatra seeks a number of young and energetic STM graduates in electronics and chemistry."

This advertisement appeared recently in a newspaper in search of STM (technical middle school) graduates. It was an indication that amidst the cry for work from the unemployed, there are some job categories that lack trained people.

As Manpower Minister Sudomo puts it, lack of jobs is not Indonesia's main labour problem. Rather, the level of education and skill of workers cannot match the requirements of the jobs available.

The Job Market Exchange reports that in 1982-83, there was 163,353 jobs available of which only 84,292 could be filled. Still job seekers numbered 782,999.

Indonesia recognises the need to upgrade vocational skills to match the demands of industries For a start, the Government plans to double the number of vocational training centres complete with equipment for practical work. Private industries are also expected to volunteer their shops for apprentice work.

Without much fanfare, a programme started in 1979, aims to develop the quality of equipment and teaching staff for STMs. The training of technical teachers falls on the School of Technology and Vocational Education (FPTK) of the State Teacher Training College (IKIP) in Padang, Sumatra, and here in Yogyakarta, a university town kilometers east of Jakarta.

Both schools are expected to produce at least 250 technical teachers each year; the first batch graduated last month (August). Because Indonesia lacks 14,000 skilled technical teachers, the graduates will start work immediately. Awarded a Master's Degree in education, the graduates are requird to teach for six years in any STM school in the country. After that they are free to choose work in industries or continue teaching.

The project is a joint effort of the Department of Education and Culture, the United Nations Development Programme and the UN Educational, Scientific and Cultural Organisation. Construction of FPTK facilities equipped with modern workshops was made possible with a World Bank loan. Today, 98 per cent of the equipment for mechanical, electrical and automotive engineering have been installed.

The technical teacher project was also made to enable STMs to keep up with advances made by industries. For instance they must also be exposed to modern training skills hampered before with the lack of modern equipment. A revision in the STM curriculum was also called for.

In 1976, such a revision was made, with emphasis on teachers who have adequate knowledge in practical work, not just theory. The new curriculum, in fact, incorporates a 50-50 division between theory and practice. Each class consists of two groups of 16 students each, maximising the use of equipment.

Even the method of instruction has been changed. For instance, one technique now used is called micro-teaching. A teacher practises teaching before fellow students. The exercise is recorded on video tape, of which a discussion is later made on a student's teaching methods.

Meanwhile, two government STM schools in Yogyakarta are sprucing up for the first batch of technical teachers graduates in the 1983-84 school-year. A vocational teaching centre (BLPT) where STM students from both schools do practical work was opened in 1981. The centre, built with a World Bank loan is similarly equipped as the teacher training schools. The first batch of graduates, trained under the new batch of technical teachers, is expected by 1984.

Previous graduates of the STM schools have already found work, especially in the textile, automotive and oil industries. Of the 490 STM I graduates in 1982, one out of four is working. Some have joined the armed forces, opened their own shops, or worked with the civil service. Many have gone for further education in college. Those still jobless are put on a waiting list.

It now appears that the STM schools and the technical teacher schools are ready to tackle advanced technology. The technical teacher schools have increased their staff, all of whom had basic training in the use of equipment and three months apprenticeship in several industries. Some have even gotten foreign training. At the same time, methods developed in technical teacher schools are also passed on to the STM schools.

Still, problems persist. For instance D. Hopkins, a British consultant with UNESCO ,says there is a lack of depth of experience in the use of sophisticated equipment. Mr. Hopkins also notices a prevalent attitude among students of not wanting to dirty their hands in shop work. He likewise points to the lack of instructors with solid industrial experience which is highly desirable during practical courses.

Another problem is maintenance. In the mechanical engineering section, for instance, only two maintenance men are available for equipment like lathe machines which alone number in the dozens. Poor maintenance could also be hazardous to students who work with high-speed, precision machines.

One way for students to increase experience is through cooperation with industries. But this is better said than done. In Yogyakarta, for instance, equipment available in the technical teacher school may not be available in local industries. Or the industries may not be willing at all to cooperate.

Sometimes, industries would indicate a desire to cooperate when they have the need. But most times, they do not want outsiders to handle their equipment. It has been proposed with education officials that a regulation be issued to enable students to do regular appentice work in industries. But no follow-up to the proposal has been done.

How much Indonesia would succeed in producing skilled STM workers, on par with the latest technology and the needs of industries, remains to be seen. The final say, of course is with the industries which will hire them.

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