

PROGRESS REPORT □ Jake Espino

Participate in the metrication drive

THE metric system is now seeping into the mainstream of our national life. Proof of this is that in a span of three years since the adoption of the metric system as the sole standard of weights and measures, a number of our industries have already gone metric. For instance, commodities like sugar, rice, fish, vegetables and fruits are now sold by the kilo.

Responsible for the significant headway in the metrication drive is the Metric System Board (MSB) which was created by Presidential Decree No. 187 issued on May 10, 1973 and amended by PD No. 748. The amended decree requires, among others, the full use of the metric system starting January 1, 1977.

But the success thus far achieved by the MSB is still far from the desired goal. This is not entirely unexpected considering that the shift to the metric system involves a change in the old ways of doing things, the traditional practices in measurements. For it is a fact that the transition period in metrication, just like all other transition periods involved in change, may entail difficulties. Most of these difficulties, however, are economic. For instance, while standardization of product sizes is required for real metrication, this cannot be done for all commodities at the same time because of the huge investment required to purchase new machinery, equipment, instruments, parts and supplies calibrated in metric units.

And besides, the government cannot just order the producers and manufacturers to junk their machineries and equipment not calibrated in metric units for the sake of metrication. To do so would amount to stunting our development efforts.

Despite these odds, the MSB has creditably performed compared to other countries which are also shifting to the metric system, according to Vicente Coloso, Metrication Program director.

Accomplishments. Coloso cites the following accomplishments of the MSB since it launched the metrication drive in 1973:

1. Completed the basic and technical definition of what constitute the metric system, the primary or base units, derived units and supplementary units, preparation of conversion factors and tables and the rules of style and usage of metric system or SI and related units; researches on Philippine laws and orders prescribing metric system and weights and measures; establishment of contacts with international organizations concerned with SI and weights and measures; setting up the organization for metrication, including continuing research on metrication work being undertaken in other countries.

2. Standard specifications have already been prescribed for the local manufacture of commercial metric weights and measures like weighing scales for general purposes, steel scales for engineers, various tape measures, surveying chains, traders' bullion and carat weights, capacity measures, medicine glasses, dispensing measures for pharmaceutical purposes, kitchen measuring spoons and measures, calibrating measures for liquids, graduated measuring cylinders. These physical standard devices are necessary for the practical, commercial application of the metric system. These are the instruments by which commodities, materials and products are to be measured in metric units for production and trading.

3. Determination and listing of the necessary laboratory equipment, instruments and other specific facilities which have to be procured and maintained by which commercial weights and measures may be tested periodically for accuracy. Estimated to cost about US\$4 million, these equipment including reference, secondary and working standards are

requisite complements for the enforcement of weights and measures.

4. The draft of a Presidential Decree/Executive Order on legal metrology has been completed and now being reviewed for submission to the authorities. It provides the rules and regulations pertaining to the usage of the metric system and weights and measures, including the enforcement machinery and penalties.

5. Informational and Educational activities have been undertaken including orientation seminars, workshops, industry dialogues, and consultations with and among government offices and private parties concerned. Among these groups are the officials of the Department of Education and Culture, Department of National Defense, Department of Public Works, Transportation and Communications, Department of Trade, Department of Health, Board of Investments, National Institute of Science and Technology, private university officials, faculty and students; Philippine Standard Association; Philippine Institute of Civil Engineers, Iron and Steel Institute, Philippine Chamber of Industries and its committees, Gold Producers Association, Base Metals Mining Association, Philippine Association of Paint Manufacturers, Philippine Association of Flour Manufacturers, Philippine Cement Corporation, sugar industry, automobile manufacturing industry, petroleum industry, and abaca industry.

6. Metrication programs have been approved as follows:

□ Weather and tide forecast and reports are already using metric units but still with English units in parenthesis during the transition period. After Jan. 1, 1977, only metric units will be used.

□ Textbooks, especially those published by the government are being revised to include changes to metric units.

□ Poultry feeds are now being packed in 50 kg bags.

□ Abaca and other fibers are now being packed in 125 kg bales instead of the traditional 126.5 kg. bales.

□ Paints, varnishes and related products are now being packed in rationalized metric sizes.

□ Wheat flour is now being packed

in 50 kg bags for bulk consumers and in rationalized small packs for general use.

□ Sugar is now being packed in metric sizes for retail; however, beginning with the next year's crop, sugar may be packed in metric sizes for wholesale purposes.

□ Gasoline and other petroleum products are being sold in metric units.

□ Cement will be packed in 40 kg bags for domestic sales, instead of 94 lb bags, and in 50 kg bags for exports, beginning August 1, 1976 and to be completed by December 31, 1976.

□ The automobile manufacturing assembly plants will metricate as soon as their mother companies metricate, but one local plant is already fully metric.

□ In the steel bars industry, weights are already expressed in metric units.

□ The gold and base metals mining industries have already adopted the metric system for their internal systems and procedures but in international transactions they have to abide by the system used by the importing country.

□ School pads, notebooks, and supplies are now in metric sizes.

Programs. The Metric System Board, on the other hand, has lined up several metrication programs, including meetings with the food and manufacturing industries for the standardization of contents of containers of liquids, semi-liquids and solid, textile industry, soft drinks industry, paper and paper products industry.

Benefits. The government is aware that the adoption of the metric system will mean an adjustment in our way of doing things particularly on matters concerning measurements. The government is equally aware that the minor difficulties encountered in the process of metrication are nothing compared to the benefits which we could derive from the metric system among which are:

1. The metric system promotes uniformity and simplification of measurements, consistency in calculations, facilitates domestic and foreign trade, affords better protection to consumers, promotes advances in science, arts and technology and at the same time tunes the Philippines, on measurement, with the rest of the world, 90 percent of

which are already using the metric system.

2. Students do not have to waste time, spending long hours memorizing and learning conversion tables from English to metric units, from metric to English units, from American to English, from customary to metric units. The metric system, which uses multiples of 10 and decimal points, is easier to learn and to use than any other measurement units.

3. Housewives and other consumers would find it easier to determine which product is cheaper to buy and thus be able to get more value for their peso.

4. Manufacturers, by producing more of a lesser number of product sizes, in standardized units, would be able to save on production cost and gain from the resulting economies of scale.

5. Farmers would be able to get more from their produce since with the use of metric units they would be better protected against dishonest trading practices and sales of their goods would be facilitated.

6. Domestic traders would be able to sell more as the products they handle are standardized, rationalized in sizes and procurement and marketing costs are reduced. Uniformity and simplicity in measurement of products would facilitate trading.

7. Exporters would be able to sell more if their products are in standard metric sizes and they quote prices in metric terms.

8. Importers would be able to maintain and stimulate their business if they deal in products already metricized since more and more goods are being produced in metric sizes abroad.

Metrication being an important national policy, government officials are expected to take the lead in promoting and implementing metrication in their respective jurisdiction.

While the Board has been created to provide the orderly shift to the metric system and to serve as the central implementing authority, the active participation of all government departments, agencies, offices and instrumentalities is necessary to be able to achieve full metrication. □

A pocket guide to metrication



		Volume or Capacity	
		cubic inch	16.387 cubic centimeters
		cubic foot	0.028 cubic meter
		cubic yard	0.765 cubic meter
		Liquid Measure	
		fluid ounce	29.573 milliliters
		cup	0.473 liter
		quart	0.946 liter
		gallon	3.785 liters
		Weight	
		ounce	64.79891 milligrams
		gram	1.772 grams
		ounce	28.350 grams
		pound	453.59237 grams
		ton (short)	0.907 metric ton (1,000 kilograms)
		ton (long)	1.016 metric tons
English Units	Metric Equivalent		
		Length	
inch	2.54 centimeters		
foot	0.3048 meter		
yard	0.9144 meter		
mile (statute, land)	1.609 kilometers		
mile (nautical, international)	1.852 kilometers		
		Area	
square inch	6.4516 square centimeters		
square foot	929.030 square centimeters		
square yard	0.836 square meter		
acre	4.047 square meters		
square mile	2.590 square kilometers		