

New Practices for Maintenance

by A M M Aabed

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MINTENANCE is a chronic ailment in the Third World; now more so, with the urge to develop, apparently faster than the local infrastructure would allow, chased by the aspiration of the plain people, and charged by the ambition of those chosen to lead the pilgrimage to economic salvation.

Within this chaotic technical mini-world, engineering management (EM, it includes maintenance) is a greater problem—non-stop, round-the-year. It is like mosquito bites for the local technical staff, and a constant irritant at the higher levels of administration and policy-making. There is no time to relax and appreciate one's truant baby, before beginning to love it.

EM is an unenviable job. It is not noticeable when everything runs smoothly enough; also it is not visible as the show is run by the boys behind the acreen, off the stage. Operation and maintenance are like the air we breathe, noticeable only when the air is not available (interruption in the service).

Engineering administration is broadly confined to personnel (trained human resource), and equipment, spares and tools; with the usual secretariat support service. Within this broad umbrella, good engineering has to be practised, in an under-developed environment. It is a herculean task for the technical staff to maintain an engineering system or network within the internationally acceptable margin or tolerance of breakdown or interruption figure, of, say, within five hours per annum.

In the essential and the utility services, with high exposure

ratio, even short interruption (power, electricity, telephone or communication) are looked upon with annoyance and disapproval. Outsidess, in the world of the consumers who enjoy these services, there is, understandably, little awareness, or appreciation, of the 'bugs' the head of engineering has to face almost every day, to keep the service going in a normal routine manner. The key words which provide the headache are normal and routine.

In the developing or under-developed countries it is difficult to get the desired level of infrastructural and logistic support to be able to provide normal routine service day after day. Let us have a quick look at the administrative problems involved in the different areas of engineering management.

Where electronic equipment is used, new technology is outstripping usage; therefore the redundancy cycle is much shorter, involving constant updating in the areas of equipment, spares, and refresher training of personnel; thereby raising the capital and operational budgets, a large chunk of which is in foreign exchange, not available in poorer countries when needed most. A popular example is the switch over from analogue to digital technology; needing recasting of the established international standards; creation of digital 'islands' in the current processing chains; faced by a staff waiting to be retrained with new testing tools. These background arrangements take a lot of time, energy and money; and more, if the human 'systems loss' is high.

The local technical academic institutions have to send

out the final year students into the professional and business world properly matched with the equipment they would be using and the new engineering practices they have to adopt. Unfortunately, the two circles, academic and user, hardly overlap. It is not easy to close this gap quickly. There is a time lag, depending on the syllabi of the polytechnics and the universities. The reverse situation is also true in many cases: the returning foreign graduate engineers are frustrated to work with outdated equipment and outmoded practices.

Brain-drain is a stark reality in the LDCs. The objective is to reverse the brain drain.

There is some good news: the government have just announced plans (as this is written) for the setting up of a dozen higher technical institutions and universities dispersed throughout the country (to cope with the economic tiger stage of the nation).

After the academic stage, the in-service training centres have

to be updated with the state of the art philosophy of engineering practices, and bring it down to routine level. An atmosphere of professionalism has to be cultivated and encouraged, working under severe odds and limitations, many of these directly outside the control of the engineers or technocrats. Looking around at the other sectors, the engineering side is not worse off than the others, but the planners and policy makers have to be a little bit more technically biased, to uplift the service morale of the technical work force helping the nation.

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The ex-finance minister Saifur Rahman in May 1995 laid stress on attaining self-reliance by mobilising domestic resources and reducing the dependence on foreign assistance for development of the country.

It is discussed every year that we must formulate a taxation policy so that there can be more revenue earning while the people are less affected with the taxation policy of the government. Our present Finance Minister has taken credit that economy did not deteriorate during the last seven months although some of the economists focused on things otherwise. The economy is losing ground when there is more borrowing for the government and lesser revenue collection. And there is pressure on the international reserve. The foreign reserve has been reduced to US \$1.8 billion compared to US \$2.02 billion at the end of 1996. MCCI records say a bearish trend persisting in the capital market, investment was considered lower, private investment rose marginally in the face of restrictions on the term of loans by commercial bank.

The present government is now busy in drafting the budget. I feel I should bring to their notice the woes of tax payers. I would discuss the assessment and appellate procedure which is in existence today. The complication of the assessment had always discouraged the innocent assessee to come under the net of tax. It is an inherent human tendency not to part with the hard-earned money. Our present law is such that the more income we earn and show it becomes core file and is subjected to more investigation and survey. The Income Tax Authority does not want to repossess confidence on the assessee and similarly the assessee does not trust the taxation authority. The assessing officer would increase the total income. It is an admitted fact that 3,32,443 persons pay tax out of total number of 6,10,329 assessee. The figure clearly shows that evasion of tax is rampant in our country. Government should realise that the assessing officer, assessee and the accountant are responsible for tax evasion at primary stage. Seeing the harassment of the people section 13A of Income Tax Act, 1922 was incorporated and thereafter the above section is now replaced by Section 35 of Income Tax Ordinance. It prescribes that the accounts shall be rejected if

surmise. Income Tax Department always tries to interpret the law in its favour and closes its eyes to the decision pronounced in favour of the subject. Sometimes our National Board of Revenue also issues circulars disregarding the principle of law decided by the judicial authorities.

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