

PLANT COST DEPENDS ON OPERATING BEHAVIORAL ASSUMPTIONS

Employee empowerment is essential in determining the minimum cost level of production facilities. That is, the cost of manufacturing depends on objectives and/or intentions of its managers and the constraints imposed upon them; such as technology, contracting rules and, to some extent, input prices. But, managers can only establish optimal objectives when employees are empowered to influence the objectives.

Different management styles and behavioral assumption, will result in different cost levels, even when plants are identical and facing the same production function (technology). Hence, the cost of a production facility always depends on management's objectives and traditionally these objectives have been the realm of salaried employees.

Too often, however, traditional management's assertions and assumptions are not observable in real life. And, after considerable investment, they are proven to be falsified. Hence, participatory management, where all employees, wage and salaried, are involved in developing, scrutinizing and testing the facility's operating assumptions will, more likely than not, minimize operating cost for any given level of output. That is, personnel that are closer to the production process are invaluable assets in identifying costly bottlenecks. This identification is crucial for the development of project (expenditure) ranking and for arresting potential problems in their infancy.

Whatever behavioral assumptions or objectives that are postulated must, however, be realistic and to be valid must be tested, a priori, against the intended outcome. The theory of comparative statics may be used to test behavioral assertions and to develop refutable hypothesis.

Suppose, for example, we assert that increasing an input of the production function, say labor, will maximize

profits. This is a refutable hypothesis because the reverse could be true. By using comparative statics we can determine the sign (positive or negative) of the change in profits with respect to the change in the variable or parameter being tested. If the sign is negative, it implies that more usage of the test parameter will reduce profits. If positive, the converse is implied.

However, ultimately, for this assertion to be valid, we therefore should be able to observe that when actual facilities utilize (hire) more labor, their cost per unit of output (marginal cost) falls. If this does not occur, our assumption is falsified.

Therefore, when we increase inputs to the production process, without ascertaining that the potential benefits of changing input ratios are greater than the costs incurred in doing so, we may not be operating in the best interest of the facility. And, such actions would tend to imply that profits are not being maximized.

B. A. Ellis, Jr.