FORMULATION OF EVALUATION CRITERIA

The objectives of the ongoing chapter are twofold: (1) to discuss theoretically the foundations on which the criteria of evaluation of the public efforts to develop the health facilities may be decided, and (2) to choose certain criteria on which the public efforts to develop the health facilities carried out by the government of Assam since the beginning of the plan period can be evaluated.

1. Theoretical foundations of the criteria of evaluation of public efforts to develop health facilities:

1.1 The Objective of Evaluation

To discuss on the theoretical foundations of the criteria of evaluation of public efforts to develop health facilities it is required that the "objectives of evaluation" must be clearly stated. One of the possible objectives of evaluation is to make an appraisal or to analyse whether the public efforts could meet their "stated objectives" or not. However, more often than not, the "stated objectives" are qualitative in nature and targets in quantified terms are not stated. In such a case it would be impossible to decide whether the stated objectives are met or not unless we concede to measure the success of the public efforts in degrees on certain scale.
In case the stated objective is only one, it is
easier to devise a scale on which the degree of success can
be measured. However, usually, this is not the case. The
objectives of a public policy or efforts are many and these
objectives are often in conflict with one another. In such
a case the task is to carry out a multi-criteria evaluation.
If each of the objectives in this type of problem is such
that it admits of measurement of the degree of success in
attaining it, the multi-criteria evaluation is amenable to
be dealt with as a vector maximum problem. Once this is
possible, we require weights to be assigned to each objective
and using these weights, the degrees of success in meeting
different objectives are subjected to a weighted aggregation
yielding the degree of overall success in meeting the objec-
tives. However, the problem of choosing suitable weights has
always been tricky and as yet no objective method to decide
weights is known.

Ragner Frisch suggests a method that may sometimes
be useful to get a rough estimate of the weights. He consi-
ders that these weights are nothing but the coefficients of
a social preference function (operational social preference function) associated with the objectives of the public
policy whose success can be measured in degrees. In applying
his method he suggests the analyst to approach the represen-
tative of the society with a menu of alternatives recording
different degrees of attainment of different objectives and
to seek his preferences. By varying the degrees of attain­
ment of different objectives in the menu, the analyst can
ascertain those particular combinations of the degrees of
attainment of different objectives about which the represen­
tative of the society reveals his indifference. Through
these combinations it is possible to work out the relative
weights to be assigned to different objectives of the public
policy.

But difficulties in applying the method suggested by
Frisch are immense. First, the question is, who is the re­
presentative of the society. It is rather impossible to
find one. The society is comprised of different classes
whose interests often conflict with one another, and each
class has a set of arguments that can justify its interests.
The ideologies for justifying interests of different classes
are different and often incompatible with one another. Fur­
ther, suppose we are ready to approach the representatives
of different classes and determine the weights of class-
preference functions, the question is how to combine a number
of class preference functions to make a single social prefe­
rence function. Once again we have to decide weights to be
assigned to different class preference functions such that
they can be aggregated. It is not difficult to see that the procedure is leading to an infinite regress.

The consequences of the indeterminacy noted above are that while for one the attainments of the public efforts may be highly satisfactory, for some other, these attainments may be unimportant and illusive. Thus one may applaud the grand success of the public efforts while the other may dismiss it as an utter failure.

The next problem associated with the exercise of appraisal is the legitimacy of the practice of entertaining only the "stated objectives" for appraisal. A public program that has been implemented may have many side-effects which did not make an appearance in the "stated objectives". It is possible that those who formulated the program could see these side-effects before hand but they did not take note of them explicitly and such an action may sometimes be purposefully directed. On other occasions, the side effects might not have been foreseeable. In any case, one may argue that appraisal should be made on the overall effects of the efforts and in accounting for the overall effects, all the effects - intended and unintended, stated and not stated, foreseen and unforeseen, should be included in the exercise of appraisal.
Another possible "objective of evaluation" of a public policy/programme is to "learn from the experience" in order to perform better in the future. If this be the objective of evaluation, it is suggestive and corrective. A receptive body of public authorities and policy-makers then admits of the shortcomings that it had had in formulating or/and implementing the programme. This objective of evaluation copes up easily with the proposals of including the extraneous criteria, the unstated objectives and unforeseen side effects in the appraisal of the public policy/programme.

1.2 Economic evaluation versus social evaluation

The choice of criteria of evaluation of public policies/programmes depends to a great extent whether the basis of evaluation is economic or social. Economic evaluation has a different frame of reference than the social evaluation has and in accordance with the frame of reference the justification of the criteria is put forth.

Economic evaluation is based on the idea that at a given point of time a society has limited resources at its disposal and they may be allocated to different programmes that may have different objectives to meet. These programmes and their objectives may be competing among themselves to
claim for the limited resources. All these programmes and objectives differ in their importance and the urgency of their fulfilment. A prudent decision to allocate the limited resources would be to optimise the resource use such that the net benefit from the programmes is maximised.

To illustrate, let us take up the problem of evaluating the public programmes on the development of health facilities. The public exchequer has a limited amount of resources and the budget is rather fixed. The physical assets and raw materials too are limited. The ultimate objective of the public programmes is to help the people live better. This objective may be met by so many possible alternative programmes e.g. financing industries to produce necessary and comfort goods, improvement of the communication and transportation network, improvement of the law and order situation improvement of educational infrastructure and so on. Then we must allocate the limited physical and financial resources on different programmes such that the living condition of the people in general is improved to the greatest possible extent.

But the questions raised by the above approach are many in number. First, what do we mean by the living condition of the people in general? What are the indicators that
measure different aspects of the living condition of the people? How to make a comprehensive and single measure or index that may be used to measure the overall living condition of the people? Should we proceed on the principle "the greatest good of the greatest number" or "to each according to his need?" And that is not all. How to measure the benefits from the improved educational infrastructure or improved transportation network, increased employment, production of necessaries and comforts, capital goods and consumption goods and so on?

The conclusion following from a perusal of these questions is that to evaluate the programme on improving the medical infrastructure necessitates the evaluation of all the public programmes together. But this is not a viable proposition. Even if it were viable, the problem of measurability of benefits is practically unsolvable. From the operational point of view, therefore, evaluation must be carried out on ad-hoc basis and this is what is really done in practice.

The ad-hocism in the practice of evaluation goes with an ad-hocism in the choice of the criteria of evaluation. These criteria are always subject to falliability in more or less degree, but there is no escape from ad-hocism.
The social basis of evaluation has a different frame of reference. The utilitarian element that is dominant in the economic evaluation is disregarded here. Social justice in the democratic framework and human rights are invoked to justify the social evaluation. But this approach too is not free from the problems. The objectives of the society and the place of an individual in the society, the conflict between the social choice and individual values and such questions are no easy matter to decide. On these issues there are different viewpoints, and each viewpoint has a support of an elaborate system of philosophy. These philosophies are often conflicting among themselves. Social evaluation based on the philosophy of Nietzsche will applaud what the social evaluation based on the philosophy of Bentham or that of Rousseau will condemn. The result is that one cannot help but take sides and face criticism. The choice of criteria for social evaluation will depend on the ideology defining the relations of an individual with the society and the state, the objectives of the social organisation and polity and the related issues. That is to say that the choice of criteria of evaluation is not ideology-neutral.

Attempts have been made to put the economic and social bases of evaluation of public policies/programmes together in a broader framework. Social justice may be defined on
utilitarian grounds. Earlier works on the choice of criteria of evaluation sought their justification on the economic grounds where economics was concerned with the market-mechanism or the institution of exchange. Recently, however, economics has broadened itself not to be limited to the market mechanism, but to include what has been named as the grants economics. K. Boulding, the leader proponent of grant economics maintains that the "exchange system" is only one of the three major modes of organising social life. The other two are the "threat system" and the "integrative system", the last one giving rise to the Grants economics. In the broad framework, then, social basis of evaluation is not beyond economics. Of course, here economics means a generalised economics that includes "Exchange economics" and "Grants economics".

Sometimes regarding evaluation of public policies/programmes the question has been raised whether the programmes produce capital goods or consumption goods. That is to say that, for example, expenditure on health should be considered an investment in human resources or public consumption. Unfortunately, when we are empirically dealing with the issue, there is a great deal of indeterminancy in classifying the goods and services into these two categories. Myrdal argues that in underdeveloped economics where people live on a very
low level of consumption, an increase in consumption expendi-
ture may be regarded as investment. After all, consumption
of necessaries leads to enhancement of productive capabili-
ties and efficiency. Viewed as such, consumption expenditure
is investment in effect as it leads to an increase in produc-
tion. However, at a higher level of consumption expenditure,
the marginal productivity due to consumption declines to
zero or becomes insignificant. Now, when we take up the issue
of public expenditure on health programmes, one may argue that
in underdeveloped economies where people have scarcely enough
resources to spend on medical care, every rupee spent on
health programme is an investment. But one must note that
it may be misleading if held indiscriminately. In underdeve-
loped economies the rate of unemployment also is very high
and this is particularly true of the Indian economy. Since
the human resources, whatever their quality might be, are not
utilised properly due to the problem of unemployment, an
investment on human resources would not bear any production
Hence, in such a situation every rupee spent on improving the
health condition may not be considered as investment.

Once again we invoke the issue of human rights. To be
unemployed is not by volition. It is because the society is
not in a position to generate enough employment opportunities.
The security of the unemployed is the duty of the society and
the State. Hence, if expenditure on health facilities does not increase production, the State should not attempt to curtail this expenditure; rather it should try to generate more employment such that the unemployed manpower can be productively employed. Once we stretch this issue further, the task of evaluation of public expenditure on health programmes becomes very much involved.

The discussion on the theoretical foundations of the choice of criteria of evaluation of public expenditure/policy/programmes on health immediately suggests us that it is very difficult, if not impossible to choose the criteria of evaluation without arousing ideological controversies and even more, to justify a set of criteria well diverge much in practice than what the theoretical considerations would prescribe. The limitations posed before a practising evaluator are, therefore, obvious. Keeping this in view it has been decided that in the present exercise we will adopt the social evaluation method in the broad economic framework. Since it is not practicable to evaluate the real benefits of the health programmes, nor the opportunity cost thereof, we will proceed with some operation criteria.
2. Operational Criteria for Evaluation of Public Expenditure/Programmes on Health Facilities in Assam

2.1 Operational Considerations

Rather axiomatically, we assert that the objective of the public expenditure on health and programmes to develop health facilities in the State of Assam has been to improve the health condition of the people in general. In fact, this objective has been declared to be the "maintained" purpose of the public efforts in this direction. The Constitution of India accords that "the state shall regard the raising of the level of nutrition and the standard of living of its people and the improvement of the public health as among its primary duties." Maintenance of public health has explicitly been given an economic justification as the draft of the first five year plan clearly mentioned that:

"in terms of resources for economic development, nothing can be considered of higher importance than the health of people which is a measure of their energy and capacity as well as of the potential of manpower for productive work in relation to the total number of workers maintained by the nation. For the efficiency of industry and agriculture, the health of the workers is an essential consideration."

Further, this maintained objective and justification for the same is reflected by the Draft third five year plan which states:
"the broad objective of the health and family planning programmes... is to expand health services, to bring about progressive improvement in health of the people by ensuring a certain minimum of physical well-being and create conditions favourable to greater efficiency and productivity."

An explicit recognition of the physical well-being at certain minimum level is a characteristically significant point for consideration. Further, in the fourth five year plan distributional justice was highlighted. The public efforts were strongly criticised to favour urban areas and as a response to the same, the fourth plan made a note to improve health facilities in rural areas.

We note therefore that the objective of the maintenance and improvement of health conditions are based on three arguments: (a) the productivity argument, (b) well-being argument, and (c) equity and distributional justice argument.

In any case, to estimate as to what extent the public efforts to maintain and improve health condition of the people led to a rise in productivity is a difficult, if not an impossible task. The net domestic product of the State of Assam has significantly increased during the period of our study. In 1961, the NDP of Assam was around Rs. 300 crores
(at 1948-49 prices) which increased to Rs. 514 crores (at 1948-49 prices) in 1976-77. But this increase may be accounted for several aspects of development like technological, structural and infrastructural aspects. To what extent did these factors raise the productivity of the workers and what net rise is attributable to the improved health conditions is a difficult and tedious task to resolve, which at any rate, requires an elaborate and independent study solely directed to accomplish with.

Similarly, the physical well-being of the people on account of improvements in health facilities is no easy matter to yield to measurement. However, this problem is not as difficult as the measurement of improvements in productivity due to improvements in health condition. Per capita income of Assam was Rs. 253.3 (at 1948-49 prices) in 1960-61. It increased to Rs. 300 in 1976-77 (at 1948-49 prices). Health facilities were significantly improved during this period as we have noted in the preceding chapter. Death rates in rural and urban areas declined significantly. Birth rates also decreased considerably. Life expectancy at birth also recorded a significant improvement. On these indicators we have enough data that may be analysed to appreciate the achievements of development in health facilities.
So far the objective of equity and distributional justice is considered we may study the district wise distribution of health facilities and it may be helpful in evaluating the public efforts in meeting this objective. Similarly, the issue of equity of distribution of health facilities in rural and urban areas may be studied.

2.2. **Criteria for Evaluation**

Since we admit of our inability to measure the contribution of improved health facilities to the improved efficiency and productivity, we propose that the improved health facilities by themselves are the measure of the degree of success of the public efforts. We assume that improved health facilities have led to an improvement in efficiency and productivity.

The physical well-being of the people may be measured by the birth rate, death rate and life expectancy at birth. It may be measured by the structure of occurrence of death due to different reasons — diseases, casualities and the remainder. We envisage that the physical well-being increases with decrease in birth and death rates and increase with life expectancy at birth. Further, if the proportion of deaths due to diseases and casualities decrease, we envisage that the well-being of the people in general is increased.
With the above consideration we propose the following criteria for evaluation of public efforts on improving the health facilities in Assam.

(1) **Criteria of Improvement in Public Health Facilities**

   (a) Area served by a Government hospital.
   (b) Area served by a government dispensary.
   (c) Area served by a Doctor.
   (d) Population served by a Doctor.
   (e) Population served by a Nurse.
   (f) Beds attended by a nurse.
   (g) Beds attended by a midwife.
   (h) Population served by an auxiliary nurse-cum-midwife.
   (i) Beds attended by an auxiliary nurse-cum-midwife.
   (j) Population served by a Dhai.
   (k) Population served by a Health Visitor (health visitors are exclusively meant for rural population).
   (l) Indoor and outdoor patients treated.

(2) **Criteria of Improvement in Physical well-being**

   (a) Birth rate.
   (b) Death rate.
   (c) Life expectancy at birth.
(d) Proportion of total deaths due to diseases and casualities.

(e) Occurrence of contagious and epidemic diseases.

(3) Criteria of Improvement in distribution of health facilities

(a) District wise distribution of health facilities measured per area and per population.

(b) Distribution of health facilities in rural and urban areas per population.

The degree of success of public efforts in improving the health condition of the people is inversely related with the measures of area, population and beds served by a unit of medical institution and medical personnel. That is to say, a decline in area, population and beds served will indicate a greater degree of success. Similarly, decline in birth rate, death rate, proportion of deaths due to diseases and casualities, and occurrence of contagious and epidemic diseases will indicate a greater degree of success. However, increase in life expectancy at birth and number of patients treated will indicate a greater degree of success. Further, a movement of distributional share of districts and rural/urban people towards equality will measure a greater degree of success in attaining the distributional justice.
References


