

PI HBE-497

65043

**INTERNATIONAL WORKSHOP:
USING ECONOMY CONCEPTS FOR HEALTH SERVICE DEVELOPMENT
YOGYAKARTA, INDONESIA**

#15

Author

Oscar Gish

6 - 22 February 1989
20 March 1989, Searo

Prepared for:

Health Sector Financing Project
Ministry of Health
Republic of Indonesia

Under USAID Contract No. ANE-0354-C-00-8030-00

Prepared by:

International Science and Technology Institute, Inc.
Suite 800
1129 20th Street, NW
Washington, D.C. 20036
Tel: (202) 785-0831
Telex: 272785 ISTI UR
FAX: (202) 223-3865

TABLE OF CONTENTS

I.	INTRODUCTION	3
II.	WORKSHOP BACKGROUND	3
III.	BRIEF REVIEW OF THE WORKSHOP	5
IV.	CONCLUSIONS AND RECOMMENDATIONS FOR FOLLOW-UP ACTIVITIES	11

Consultancy

Oscar Gish Consultancy to the Health Financing and Policy Analysis Unit:

January 25 - February 25, 1989. ISTI Contract No. ANE-0354-C-00-8030-00.

Scope of Work:

1. Assist with final preparations for the International Workshop, specifically to include:
 - a. final review and check of technical reference materials to be used during the workshop;
 - b. final review and check of field work exercise which will be used during the workshop.

With reference to a. above the consultant went through the materials gathered for the workshop, discarded some, added others, and generally assured their quality and quantity. The documents which were finally circulated at the workshop appeared to be both sufficient in number and appropriate to the issues being discussed.

With regard to b. the consultant was broadly satisfied with the material prepared for the field work exercise, despite some problems with the data which had been collected. In any event, because the entire exercise was based on field realities, even the difficulties experienced with the data could be turned into useful learning materials. Both participants/observers and resource persons expressed a high level of satisfaction with the field exercise and its results.

In addition to a. and b. the consultant assisted in a number of other preparatory activities for the workshop.

Scope of Work:

2. Serve as a full-time resource person to the workshop.
3. Deliver selected lectures during the workshop.

The consultant attended all sessions at the workshop, made two major presentations, acted as moderator for many sessions, took part in all plenary and group discussions, and was actively engaged in all aspects of the workshop.

Scope of Work:

4. Write final workshop report.

As had already been discussed, it was not possible for the project to provide the consultant with time after the end of the workshop for the purpose of writing a workshop report. Therefore, WHO was requested by the Government of Indonesia to provide such time. The consultant will spend about one week in Jakarta at the conclusion of the workshop and then, after a week in Bangkok on other business, two weeks in New Delhi at the WHO Southeast Asia Regional Office "contributing to the preparation of a workshop report, editing workshop recommendations and preparing a follow-up action plan." This report will be sent to the Government of Indonesia and ISTI when it is completed in New Delhi towards the end of March (or very shortly thereafter).

The workshop appears to have been eminently successful, with regard both to its potential usefulness for the participants from other countries, the Indonesian participants and observers, and to the work and status of the Health Financing and Policy Analysis Unit. Significant momentum has been created as a result of the publicity surrounding the workshop and the perceived link between it and Dr. Nakajima's (Director-General of WHO) visit, as well as the founding on the opening day of the workshop of the Indonesian Health Economics Association in the presence of Dr. Nakajima, Dr. U Ko Ko (Regional Director of the Southeast Asia Region of WHO) and the Indonesian Minister of Health Dr. M. Adhyatma.

It is certainly the case that Dr. U Ko Ko and other senior WHO/SEARO officials are very pleased with the response to the workshop and expect it to contribute substantially to the establishment of a firm basis for further activities in the area of health economics in Southeast Asia.

Scope of Work:

5. Assist the Director, HE&PAU, to complete the review of health financing related data and to draft an English language summary of the review and analysis.

This part of the scope of work was discussed with both USAID and project officials in Jakarta, taking into account the current situation with regard to these documents. The English language summary of the review has been completed and circulated. In addition, an analytic review has been prepared (it is still in Indonesian) and is being circulated for comments. This process, which had been facilitated by the Consultant's November visit, should be completed by the end of March. There was further discussion about the feasibility of sending a translation of the next draft of the analytic review to the consultant in Seattle for additional comment and input.

I. INTRODUCTION

The workshop had been under development over an extended time period, having been conceived within Indonesia during the first half of 1987. The turning point, which assured its coming to fruition, came in mid-1988 with an exchange of letters between the (then) Director of the Planning Bureau of the Indonesian MOH and the Regional Director of SEARO.

In the event, support for the workshop was gained not only from SEARO, but from WHO HQ (two resource persons), WPRO (four countries from the Region took part), the Ford Foundation (support for four participants from India and one resource person), the World Bank (one part-time resource person) and USAID (primarily in the form of support for more than 20 Indonesian observers and this consultant). The Indonesian WHO country budget was utilized to cover the bulk of national internal costs for the workshop.

In all, 13 countries took part in the workshop of which seven from SEARO, four from WPRO and two from EURO (financed by SEARO). There were 35 full-time participants and over 20 Indonesian full-time observers, plus a significant number of others who attended on a part-time basis.

This report is being written for SEARO, but also will be available to USAID, who paid the consultant's fee and per diems for the period preceding and during the workshop as well as return travel to Jakarta/Yogyakarta from the consultant's home station. SEARO is covering three weeks of the consultant's time, of which one was in Jakarta and two were in New Delhi.

Aside from the introduction this report will contain three parts. The first will present the basic rationale and issues representing the background to the workshop; the second a brief review of the workshop proceedings; and the third and most important, a summary of the major conclusions and recommendations which come out of the workshop, including specific proposals for follow-up activities which, taken together, could become the basis for a Regional program of action in the area of health economics.

It should be noted that one or more detailed reports of workshop proceedings (which this report is not) have been prepared by another SEARO consultant and an Indonesian team.

II. WORKSHOP BACKGROUND

International

Health economics as a formalized area of study and activity is relatively new. Despite some scattered earlier interest in the subject within the economics profession, it was not until the middle 1960s that a recognized body of knowledge began to be developed and a number of professional economists become involved with the subject. One important factor which encouraged this interest was the effort to identify the sources of economic growth which had occurred in Western Europe and the United States during the latter part of the 19th century and first half of the 20th. It appeared that the usual economic measures of land, labor and capital -- the classical inputs to growth -- could not adequately explain the expansion in economic output which had taken place over that period. In other words, after accounting for conventionally defined land, labor and capital inputs, an unexplained "residual" was then assumed to have resulted from a growth in the value of "human capital"; that is, the quality of labor's contribution to economic growth. In previous measures of labor inputs only quantity had been taken into account, not improvements in its quality. At this point, economists began to study the bases for the assumed improvements in labor

outputs and identified, in particular, the contributions of education and health. At a later stage other growth related factors began to be cited, mostly in areas of management.

Another factor which has contributed to the development of health economics has been the rapid growth of the health sector as an economic entity. This is a familiar story and will not be repeated here: from an essentially "cottage industry" base the sector has grown to become a major part of overall economic activity in all the industrialized countries (now over 11% of GNP in the United States) and a significant part in most developing countries. In connection with these developments, and building on a base of earlier financial data which had been routinely collected within health ministries, studies began to be carried out relating to various aspects of health sector resource mobilization, finance allocations, resource utilization, and so on (the surveys conducted for WHO by Brian Abel-Smith were an important step in this process).

Despite some resistance to the introduction of economic techniques into the health sector, fairly rapid progress in the area is now being made. Fortunately, at least some of this resistance had been based on only a lack of proper communication and understanding between medical doctors and economists. A more serious type of resistance stems from the perceived interests of some elite sections of the curative medical establishment. (In addition, of course, politicians in all countries have their own reasons for supporting or rejecting any particular activity, especially if it is innovative in character.) In any event, it is becoming increasingly difficult to justify health sector development plans based primarily, if not only, on so-called needs based approaches to health, approaches which do not take into account the cost implications -- especially of the recurrent costs - of the newly planned inputs.

A series of WHO meetings concerned primarily with health sector financing was begun in 1977 with one held in Geneva: the results of this meeting were later published in the Technical Report series under the title Financing of Health Services. More recently the interests of WHO and its member states have been gradually extended beyond the more narrowly defined area of health financing to a number of wider and inter-related economic issues (see Economic Support for National HFA Strategies, WHO, Geneva, 1988). Most of these issues were discussed during the course of the workshop (see below).

In any event, for a number of diverse reasons, it has now come to be recognized that health economics and its practitioners have an important role to play in the future development of the sector. This recognition reflects changing assumptions about the nature of the health sector as well as the circumstances which surround and largely dictate its possibilities and functions, as outlined in the following.

Some outdated assumptions:

- Health services are the key input to improved health status.
- Health services (as the key input to improved health) are above considerations of cost.
- The most advanced medical technology is always the best and must always be available, regardless of cost.
- Health technology managers of health care (specialists) always know best, not only about clinical subjects but the organization and financing of health services.
- In fact, the whole of the "medical model" is being questioned internationally.

Changing circumstances:

- Economic difficulties in both developed and developing countries.
- Increasing recognition that governments cannot do everything.
- Run-away health care costs, especially in developed countries.
- Growing recognition that health care is not the key input for improved health status.
- Diminishing health status returns on health care investments, especially in developed countries.
- Growing doubts about the efficacy of much of the medical technology being employed.

The growth of interest in health economics is a logical outcome of these changing assumptions and circumstances. At the same time it is necessary to understand that health economics is not a discipline in itself but rather the application of economics to the health sector, which means it is necessary to understand the special characteristics of the sector. There is always the danger of inappropriately applying too narrow a set of economic ideas which see health care only as another market-based commodity. There is the concomitant need for the balanced, appropriate use of economic concepts that are concerned with the efficient use of resources in keeping with their equitable distribution.

Indonesia

In December 1984 Indonesia held its first national workshop on the subject of health economics. Since then much has happened in this area, both in Indonesia and internationally. At least two major recent developments contributed to the greater attention being paid to economic factors as part of the development of health service policy. One of these was growing awareness of the basic importance of such factors to the successful accomplishment of the Health For All/Primary Health Care initiative. The other, more immediate one, is the budgetary reductions of recent years experienced by the ministries of health of many countries, including Indonesia. These reductions have created serious difficulties for the proper utilization and functioning of existing health facilities and trained personnel.

In addition to the above, more general, reasons, Indonesia has been developing its experience in this area through a series of wide-ranging collaborative efforts with a number of external agencies, e.g., WHO, USAID, World Bank and Asian Development Bank. This collaboration has contributed to the building-up of a core group working in health economics and the establishment, on the opening day of the Workshop, of the Indonesian Health Economics Association.

III. BRIEF REVIEW OF THE WORKSHOP

Purpose of the Workshop

The workshop, while drawing upon the experience of other national and international seminars and workshops, was focussed in particular on the practical application of economic concepts to the specific policy-making needs in the light of feasible alternatives. The objectives of the workshop were facilitated by its being held in Indonesia which had developed a considerable body of experience in this area.

Organization

The Bureau of Planning of the Indonesian Ministry of Health acted as focal point for the workshop. In addition to the MOH the organizing committee for the meeting included members drawn from a number of government and non-government departments and agencies, universities and other academic bodies, the World Health Organization and USAID.

Workshop Content

The workshop dealt with the following three broad areas:

- health and development;
- determinants of health;
- health and the economy.

And the following more specific areas:

- the role of government and of the market;
- the application of economic concepts;
- the application of economic techniques.

Planning for the efficient use of resources:

- productivity;
- costs;
- evaluation.

Financing the sector:

- public and private sector alternatives and complementaries;
- charges, insurance systems;
- management, measurement, other technical aspects.

Implications for policy:

- HFA/PHC and equity;
- program development and child survival.

Methods and Staff

The workshop combined lectures, country presentations, field-based exercises and group activities. Discussions were led by resource persons recruited both internationally and nationally.

Materials

A packet of selected readings was distributed to all participants. In addition to internationally published materials, these included the results of relevant Indonesian studies and experiences. Workshop participants distributed other relevant materials from their own countries.

Opening

In his address Dr. Nakajima, Director General of WHO, discussed some of the inter-relationships between economics and health. He referred to the debt burden borne by many developing countries

and the related cuts in public sector spending for health care. He also spoke about the need to change the concept of national "striking power" from military to economic, including such critical social components as health and education. Such a change in concept would release funds from current military uses to economic and social development. Dr. Nakajima also made the point that although important, cost analyses and cost containment policies alone could have little impact on health sector budgets in the absence of other changes in the economy.

The Director General felt that Indonesia was well-suited to be host for the workshop. Among other reasons he cited the country's recent economic history: the "boom" years of high oil prices followed by the depressed prices of recent years and consequent economic adjustment policies which have led to sharp cuts in already relatively low health sector budgets. Dr. Nakajima also expressed his support for Region-based training activities such as this workshop.

Lectures and Follow-up Group Work

Fourteen formal lectures were given during the course of the workshop: three by Prof. Abel-Smith, two each by Dr. Berman, Mr. Creese and the consultant, and one each by Dr. Brotowasisto, Dr. Ascobat Gani, Prof. Moebiyarto, Mr. Prescott and Dr. Orzeszyna (for himself and Dr. Zakir Husain). The lectures covered a wide range of issues, both conceptual and technical. The content of the lectures will not be described here (that will be done by others as part of the workshop proceedings), although their most important aspects will be reflected in the final part of this report which will deal with workshop conclusions and recommendations for follow-up activities.

There were many important highlights in the lectures and follow-up discussions which could be cited, but only three will be mentioned here. One was Prof. Abel-Smith's discussion of the World Bank's new proposals for reorganizing health sector financing arrangements, which were quite effectively shown to be very seriously flawed. Another critical point was made during the follow-up discussion to this presentation when it was pointed out that an "easy" solution to the problem of financing health care was available, namely, full cost user charges. Of course, this would lead to very many, perhaps the majority of the population, being excluded in many countries from most or even all health care. In response it was pointed out that such a system of charging already existed in the private sector, and that whatever were the virtues of that system, the public sector had a different role to play and required its own "terms of reference."

Mention will also be made here of Prof. Moebiyarto's significant lecture in which he placed economic studies of the health sector into the wider context of the history of the discipline of economics. He discussed the two major components of the discipline; namely, social sympathy within communities, and competition. Strong doubts were expressed about the usefulness of applying neo-classical economic approaches, e.g., demand analysis, which are derived from and base themselves upon the competitive component of economics rather than the one of social sympathy.

Several of the lectures were followed by organized group discussions in which participants were asked to assemble data and respond to a number of issues/questions.

Country Presentations

There were two separate sets of country presentations. The first included only five of the 13 participating countries: China, India, Indonesia, Mongolia, and a European overview presented by the Spanish participant. These presentations were concerned primarily with country experiences in using economic analyses in the health sector.

The second set of presentations, coming toward the end of the workshop, were more narrowly focused. Participants had been asked to bring with them information about their country's experiences with the application of user charges and development of systems of health insurance. Although varied in quality these presentations provided the basis for excellent discussions about both user charges and the potential for health insurance in less developed countries.

One especially important question arose about the meaning and use of the concept of cost-recovery. The point was rather forcefully made that the term as now being used was confusing rather than clarifying issues. So-called cost recovery actually refers to at least two quite distinct things, one of which is user charges and the other health insurance. Whereas health insurance systems (public or private, compulsory or voluntary) might be the basis for the bulk of health care payments in a particular country, direct user charges rarely covered more than a very small part (less than 10%) of all health care payments.

Lumping together health insurance and user charges under the title of cost recovery was making it more difficult to understand what was actually happening and of devising appropriate policies in these areas. The issue was further clouded by also sometimes including private drug purchases -- usually in markets and shops and not pharmacies -- in the figure for "cost recovery." It is absolutely necessary to separate out these various financial flows if any clarity is to be achieved in the issues under discussion.

Field Work

One of the basic reasons for holding the workshop in Indonesia, a developing country, was that it offered the possibility of carrying out a field-based exercise based on existing realities. The participants were divided into four groups for the exercise, plus two other groups composed of Indonesian observers. The field exercise involved the application of economic concepts to District level planning. Field exercise data books were assembled prior to the workshop, one for each of the four Districts in Yogyakarta Province. These were then distributed to the members of each of the four groups. The data included material about the overall District social and health situation, the district hospital, one health center, one sub-center and one integrated health post (posyandu).

The groups spent two days visiting their respective Districts and health facilities where they were given additional materials and had discussions with the local health workers. The groups met on each of these two evenings to discuss their visits and organize their group reports. The third day of the exercise was spent in report writing, and the fourth and last day was devoted to plenary presentations of the group reports. A summary of the group reports was then prepared, presented and discussed. That summary follows:

General Observations Relating to Efficiency, Equity and Effectiveness

	<u>Relates to</u>
▪ low overall utilization	Efficiency
▪ maldistributed utilization	Equity
- insured -- not insured by distance	
▪ referral system not working	Efficiency/Effectiveness
▪ staff productivity low	Efficiency/Effectiveness
▪ curative bias	Effectiveness

- poor quality Effectiveness

Equity

- Higher public sector subsidies should go to non-civil servants, possibly in the form of block grants.
- Wider geographic coverage is needed, possibly by using more mobile services.
- Promote awareness of health services -- health education.

User Charges

- Differential charges should exist between hospitals, and health centers and sub-centers.
- Minimum user charges for civil service insurance beneficiaries in addition to the contribution taken from their salaries.

Insurance Scheme

- Introduction of insurance schemes, but premiums must cover full economic cost of services provided.

Efficiency

- Increase the operational budgets of health centers and sub-centers.
- Restrain development budget/new projects until existing system is working better.
- Reallocation of staff.
- Referral
 - regulation/especially for civil servants
 - co-payments
 - health education
- Efforts to limit private practice for government practitioners.

Data

- Lack of appropriate data
 - coverage
 - user chargers
 - fixed and variable costs for programs
 - constant price data
- Quality of data
e.g., demographic statistics, utilization, resource allocation, etc.

Management/Studies

- Output and coverage targets.
- Health behavior surveys.
- Introducing economic concepts to all health personnel.

Other Comments About the Field Exercise

- Interdisciplinary character of the groups/successful integration of discussions.
- Successful inter-country exchange.
- Practical aspect of the field exercise.
 - the reality of being "there"
- Even limited data, if handled properly, can be used for learning and policy development.
 - in using this limited data the groups developed common ways of thinking and approaching problems.

The last full day of the workshop, plus part of one earlier day (the paper on Training and Research in Health Economics by Husain and Orzeszyna) were devoted to discussions of conclusions, recommendations for follow-up activities, etc. These will be discussed in the next part of this report.

Before going on to the final section of the report, it might be useful to indicate here in schematic form those aspects of the workshop which seemed to work well and those which didn't, with some suggestions as to why this was so.

Positive

- Holding the workshop in a less developed country, especially one with some experience in the relevant field (health economics).
- The field exercise, which was based on a well-proven methodology, at least within Indonesia, and which allowed the participants to work with at least some of the concepts being discussed at the workshop in the context of real needs, real places and real data.
- A serious approach to the sharing of country experiences, especially in the context of such a relatively unexplored area as health economics.
- An open discussion between both resource persons and participants and among the two groups.
- The relative absence of a "we teach, you learn" attitude on the part of the resource persons.

- A strong group of experienced resource persons with a substantial level of relevant experience and skills (knowledge of substance was not replaced by workshop organizing type skills and communication abilities).
- Close follow-up of workshop arrangements over its long gestation period.
- Having most of the country presentations near the end of the workshop -- and after the resource persons' presentations -- helped the participants to organize them better.
- Focussing these country presentations on only two selected issues (user charges and health insurance) helped guide the discussion and keep it within useful limits.
- The presence at the opening of the workshop of the Director General of WHO, the Regional Director of SEARO and the Indonesian Minister of Health added a certain "spice" to the event.
- Interagency collaboration between WHO, USAID and the Ford Foundation was also useful.

Negative

- The workshop was bit too long; two weeks would have been better.
- Some of the participants were insufficiently senior to either fully benefit from the workshop or to pass on or act upon its findings in a meaningful way after they had returned home.
- Some non-government/private sector facilities should have been studied as part of the field exercise.

IV. CONCLUSIONS AND RECOMMENDATIONS FOR FOLLOW-UP ACTIVITIES

This section will be in two parts. The first will list the major conclusions of the workshop and the second a number of follow-up activities recommended by workshop participants and resource persons.

Conclusions

- There is a lack of awareness about the potential usefulness of health economics for the future development of the sector, and related weaknesses in training activities.
- Most countries are doing more to collect financial data, especially relating to resource mobilization and -- to a lesser degree -- resource allocation. However, there are many obvious gaps in the work now being done. Some of the most obvious of these relate to the appropriate classification of resource flows, the potential and effects of user charges, policy options in relation to insurance schemes, who pays and who benefits from health sector expenditures, and so on -- the list is a long one!
- A considerable level of confusion exists over the meaning of "cost recovery." In practice it usually comprises a number of distinct entities, in particular user charges and

insurance-based payments. Out of pocket payments for pharmaceuticals or other household expenditures may also be considered as some sort of cost recovery.

- There is an urgent need for recurrent cost based planning of health facilities and programs as well as employment-based planning for the training of additional health workers.
- There is an urgent need for health service planning based on outputs (numbers of inpatients or outpatients, or immunized children) rather than inputs (more buildings or medical doctors). Output planning must take into account not only the volume of service units produced but their distribution, especially among those most at risk (by sex and age, by social and economic status, etc.).
- The possibilities and effects of alternative financing mechanisms such as user charges, health insurance programs, private sector possibilities, revolving drug schemes, and so on, are high priority areas for study and policy development.
- The role of pricing mechanisms in achieving greater levels of efficiency and equity is another important area for study and policy-making.
- More field experiments are needed, not only conventional academic type studies. While certain more or less conventional studies may be useful for training and possible for policy-making as well, experiments/trials are especially well suited to the development of policy and decision-making.
- Many subjects were mentioned for possible study during the course of the workshop, of which the key ones already have been indicated. The important point was made that the reason for studying resource mobilization, allocation and management is to improve the ways in which they are being used in relationship to improving people's health. The techniques of studying such issues could not substitute for the issues themselves; for example, the basic reason for studying user charges is to learn who pays and who benefits from them, not to develop elegant new ways to quantify them.

Follow-up Activities

The primary objective for follow-up activities to the workshop should be to improve the capacity of countries to use and apply relevant economic concepts for the development of appropriate health sector policies. This would entail the strengthening in this area of both Ministries of Health and other selected government and non-government institutions. Specific types of follow-up activities are outlined below.

Training/Exchanges of Experience, etc.

Both shorter and longer term types of activities are required in keeping with specified objectives, e.g., increasing awareness of the potential uses of health economics, training in relevant technique, the development of policy-related studies, and longer term degree programs. Most of these activities will be country specific, but others may be inter-country. Some specific recommendations follow:

1. A one week, high level, SEARO inter-country meeting should be held, building on the experience and momentum established by the Yogyakarta Workshop for the purpose of firmly establishing in the Region a "program for action in health economics." Relevant national experiences from within the Region would be utilized to the fullest. Prior to

the meeting, a survey document of such relevant regional experiences would be prepared, including materials from the Yogyakarta workshop. The further development of health economics within the Region, including the holding of this meeting, could be discussed at the next Health Ministers Meeting to be held in October 1989.

2. National meetings of the same type should follow the SEARO inter-country meeting.
3. Short national training workshops, of one to two weeks' duration, in techniques of economic analysis should be carried out (see below for suggested topics).
4. At present there are few highly trained, experienced and qualified health economists in the Region. A large part of the work in health economics which is being done is being carried out at University departments often removed from the work of Ministries of Health; this is one important reason Health Ministries have not come to see the potential usefulness of economic analysts in the sector. Regional centers of excellence are required which can, among other things, develop degree programs in health economics. In the short term, but also to contribute to the development and/or strengthening of such centers, there is need for international training in this area. It is critical that such training be as appropriate as possible to the real needs of the countries of the Region. The conventional one year MA or MPH is of only limited usefulness for the preparation for those who will become leaders in the field. More appropriate would be either selected Doctoral programs or two year Master's level courses based on one year of course work and one year of applied thesis work during which the students could apply what they had learned in their first year of study. To the degree possible such programs should be balanced rather more toward applied work than purely academic study and research.

Priority Subjects for Meetings/Workshops

The range of workshops and meetings which could be undertaken is substantial; many of these already have been indicated. Some priority, policy-related areas are listed below:

- awareness raising meetings for high level officials;
- short familiarization courses in health economics for senior staff from health, finance and planning ministries;
- alternative financing mechanisms -- potentials and problems -- especially in the areas of insurance programs and user charges;
- private and public sector relationships, especially in the area of financing;
- resource-based health service planning;
- output oriented health service planning;
- economic approaches to health manpower development; and
- various issues relating to pharmaceuticals.

Some more technical workshops and meetings are also required on such subjects as:

- methods for measuring household demand for health services,
- classification systems for financial plans in the health sector and development of related reporting systems, and
- methods for measuring equity changes in response to changes in resource mobilization and allocation patterns.

Information

The type of printed information which is most needed has been indicated in earlier sections of this report. As part of the process of developing economic analyses for health service application, high priority information areas are likely to include:

- measurement of all health sector (public and private) revenues and expenditures over time, according to such variables as source, governmental/administrative level, geographic area, type of activity;
- measurement of all health sector (public and private) utilization over time by different sections of the population, according to such variables as type of service (preventive, curative), sex and age, geographic area (especially rural-urban), socio-economic characteristics such as income, occupation, insurance status; and
- measurement of unit costs for service outputs, and other basic information relating to the work of individual health service facilities and programs.

To enhance the value of such financial information, equal attention must be paid to the output side of the equation; that is, the production of services which flow from particular financial inputs. Furthermore, it is not only the volume and type of outputs which must be measured, but their distribution among the population. Such information will have to be integrated into efforts to quantify and analyze health care financing systems if these analyses are to contribute to the development of health care services which are both efficient and effective in meeting the needs of entire populations.

Regions and National Associations of Health Economists

A national association of health economists should be stimulated and supported (one has been set up already in Indonesia). At a later date a Regional support association should be established, possibly jointly with WPRO. The types of activities sponsored by such associations, either without or among countries, could include:

- meetings, training workshops, consultations, etc.
- exchanges of information; an information clearinghouse should be considered
- development of training materials
- publication of technical and other reports as appropriate
- preparation of an index of relevant Regional institutions and expertise.

Financial support for these activities could be mobilized by SEARO, possibly jointly with WPRO, from international funding agencies. An initial meeting to stimulate the creation of such associations should be held at an early date.