

Funding of Health Research and Development of National Institutes of Health in Malaysia



A consultancy report

**Prepared by
Goran Sterky
COHRED Consultant**



**The Council on Health Research for Development
Geneva, 2000**

COHRED document 2000.8

Author

Goran Sterky, Md, Phd, Prof. (Emeritus)

Contact Address: Department of Public Health Sciences
Division of International Health (IHCAR)
Karolinska Institutet
SE-17176 Stockholm, Sweden
Tel: (46-8) 765-7870
Fax: (46-8) 765-5851
Email: Goran.Sterky@phs.ki.se

For copies of this publication and/or further information, please contact:

The Council on Health Research for Development (COHRED)

Mailing Address:
c/o UNDP, Palais des Nations, 1211 Geneva 10,
Switzerland

Physical Address:
International Environment House
13-11, Chemin des Anémones
CH-1219, Châtelaine, GE
Switzerland

Ph: +41 22 917 8558
Fax: +41 22 917 8015
Email: cohred@cohred.ch

This document is also available as a PDF at:
<http://www.cohred.ch>

Acronyms

COHRED	Council on Health Research for Development
CRC	Clinical Research Centre
DDG (R&TS)	Deputy Director-General (Research & Technical Support)
DG	Director General, MOH
ENHR	Essential National Health Research
HSR	Health Systems Research
IHM	Institute of Health Management
IHP	Institute of Health Promotion
IMR	Institute of Medical Research
IPH	Institute of Public Health
IRPA	Intensification of Research in Priority Areas
MOH	Ministry of Health
MP	Malaysia Plan
NIH	National Institutes of Health
RM	Malaysia Ringgit (1USD=3.80RM)
TDR	UNDP/World Bank/WHO Special Programme for Research and Training in Tropical Diseases
WHO	World Health Organization

Table of Contents

Chapter 1: Executive Summary	1
Chapter 2: Introduction	2
2.1 Problem statement	2
2.2 Consultant's work programme and methodology	2
2.3 COHRED's perspective	3
2.4 Consultant's perspective	3
Chapter 3: Development of Health Research Funding in Malaysia	4
3.2 Ministry of Health	5
3.3 Universities.....	5
3.4 ENHR.....	5
Chapter 4: Mechanisms for Health Research Funding	7
4.1 Priority directions	7
4.2 Project reviews	7
Chapter 5: National Institutes of Health (NIH)	8
5.1 The concept	8
5.2 The five Institutes	8
5.3 Research capability	10
5.4 Strategic planning workshop	10
Chapter 6: General Discussion	11
Chapter 7: Conclusions	13
Chapter 8: Recommendations to the Ministry of Health	14
8.1 Short-term	14
8.2 Long-term	14
Chapter 9: Recommendations to COHRED	15
Chapter 10: Acknowledgements	16
Chapter 11: References	17
Annex 1: Terms of Reference	18
Annex 2: Work Programme	20
Annex 3: Individuals Consulted.....	22
Annex 4: Workshop Report	24
Appendix 1: List of participants	26
Appendix 2: Background Document	27

Chapter 1: Executive Summary

In 1988 the Malaysian government allocated a special fund for investment in Research and Development called the Intensification of Research in Priority Areas (IRPA) programme. This provided a major stimulus to health research in Malaysia. However, the fund operates under a mandate that only partly meets the demand for, and the needs of, health research. In addition to this, the allocation from the IRPA to health research has recently begun to decline.

The Ministry of Health (MOH) has five research institutes (totalling hundreds of health researchers) at its disposal to implement a research priority agenda. However, despite the presence of a coordinating mechanism, the research activity of the institutes is unstructured and uncoordinated. The MOH feels therefore, that there is an urgent need to develop a strategic plan.

The MOH requested COHRED to fund a consultant to assist in addressing these two areas. The consultant was based at the Institute for Medical Research (IMR) for four weeks, interviewing and reading policy and research documents. During this time, a one-day strategic planning workshop was conducted with 15 senior researchers. The consultant's draft recommendations were discussed with senior MOH staff in the last week of the assignment. The overall recommendations follow.

The future health research agenda cannot, and should not, adapt itself to meet the mandate of IRPA, with its focus on commercialisable products. Thus, a major recommendation is that the MOH and the universities request that the government allocate **a new, untied and long-term fund** for health research. Time-limited funds to priority areas in need of special stimulation will be complementary. Both funds should be granted on a competitive basis, and in a transparent manner.

The strategic planning workshop was well received as an important means of focusing the joint research activities of the five institutes. The institutes currently fall under the umbrella of the National Institutes of Health (NIH) - a coordinating mechanism established in 1996. It was recommended that any strategic planning exercise must address the coordinating function of the NIH, providing a more structured corporate plan which would enhance research coordination and coherence between the institutes. This recommendation was endorsed by the Director-General and others during the discussions in the final week of the consultation. In addition to this, the NIH needs to make a major effort towards strengthening research capacity, particularly in the human and social sciences. Biomedical research activities are currently very scattered, and need to be refocused. A number of immediate measures should be implemented to make NIH one entity.

For long-term success in **research, a culture** needs to be created that will attract new researchers. The current status of researchers within medicine is poor and at variance with the situation in most countries. Career structures, university education and many other areas need to be addressed.

COHRED's support for a resource flows study is important and a **monitoring mechanism** should be developed. The character of health research funding in Malaysia and the unusual strength of the MOH in research makes it difficult to draw any conclusions applicable to other countries.

Chapter 2: Introduction

2.1 Problem statement

In the last ten years, health research in Malaysia has been largely funded under the national IRPA programme. In the past it was focused on Essential National Health Research (ENHR). However, recently there appears to be an increasing emphasis by central authorities on health research that can be commercialised. If this policy is upheld it would prove detrimental to ENHR and ultimately effect the health status of the nation.

There are currently five major research Institutes undertaking research on behalf of the Ministry of Health. In 1996, the 7th Malaysia Plan (MP) proposed that a national coordinating mechanism for these research Institutes be established. This mechanism is now known as the National Institutes of Health (NIH). Activities amongst the research institutes of the NIH are extremely varied. Some are purely research institutions, some are purely teaching, whilst others are a mixture of both. In addition to this, some of the Institutes are well established with good formal plans in place, whilst others are relatively new institutions, and have not yet developed their plans. In short, there is an urgent need for an overall strategic plan for the NIH to provide coherence.

2.2 Consultant's work programme and methodology

In a letter to COHRED in May 1999, the DDG (R&TS) of the MOH in Malaysia requested COHRED to appoint and fund a consultant to assist the MOH in the two tasks described above. COHRED's usual procedure is to appoint a consultant from a neighbouring country, so an attempt was made to recruit such a consultant. Having failed in this endeavor, the present consultant was approached in November 1999.

The consultant's name was forwarded to the Malaysian authorities in early December 1999. Their approval was received in mid-January, and the consultancy took place between February and March 2000.

During the eight month span between the request and the time of the consultancy, a great number of discussions on health research policy and organisational structures had taken place in Malaysia.

Prior to taking up the assignment the consultant had the opportunity to visit the COHRED Secretariat in Geneva. The consultant was briefed by Dr M. Jegathesan, acting as a consultant to COHRED and previously the DDG (R&TS) in Malaysia.

The consultant mainly based his work on discussions with individuals and small groups of people. They were mostly MOH managers and researchers as well as leading persons from two universities. A group of medical students were also interviewed. It was not possible to hold discussions with representatives of central authorities or non-medical sectors as requested by the consultant.

Another major source of information was the various documents - ranging from policy statements to research project applications and research publications. The consultant was greatly assisted by the ongoing COHRED-sponsored study on resource flows for research in this work.¹

The first briefing session took place in week 1 of the consultancy, and was attended by approximately 20 people from the MOH. A one-day workshop on strategic planning was held during the third week (15 participants). The consultant's draft recommendations were tabled at the beginning of the fourth week.

2.3 COHRED's perspective

The consultant has interpreted the views of COHRED as follows. Having promoted the ENHR concept in many countries including Malaysia, the threat to diminishing national funding for ENHR is feared to be repeated in many South East Asia countries. A macro perspective would be that the economisation and globalisation would be a threat to the social sectors anywhere and thus, Malaysia could serve as a test case. The expectations of COHRED would be that ENHR could be translated into economic terms and thereby convince "hardline" decision-makers. It was also hoped that putting the policy of the NIH into action would be a learning exercise.

2.4 Consultant's perspective

The consultant's experience from national and international health systems and health research has prepared him to acknowledge that there are many different solutions to similar problems. In a young and rapidly developing nation, the culture of research cannot yet be solid. Thus, in order to meet the challenges of the coming decades, Malaysia can also draw on the experiences of other countries in supporting and fostering health research, essential for development. It is the consultant's opinion that there are global or generic approaches to some problems.

The consultant is of course influenced by his own professional experience in clinical, public health and health systems research. Whenever feasible, both the "top down" and "bottom up" approaches have been taken.

1 At the time the consultancy was undertaken, this study was ongoing. However it has since been published as Alano BP and Almario AS (2000) *Tracking Country Resource Flows for Health Research and Development (R&D): A comparative Report on Malaysia, the Philippines, and Thailand with A Manual on Tracking Country Resource Flows for Health Research and Development*. Centre for Economic Policy Research, Manila.

Chapter 3: Development of Health Research Funding in Malaysia

The IMR and the medical faculties of the Malaysian universities have been conducting health research for many years. The IMR's main focus has been on tropical diseases. The main funding source has been the regular or operational budgets of the respective institutions.

3.1 Intensification of Research in Priority Areas (IRPA)

The National Council for Scientific Research and Development was established in 1975. In the 5th Malaysia Plan (1988), the Ministry of Science, Technology and the Environment launched the IRPA programme which allocated special funds for Research and Development (R&D) under a mechanism termed the "Intensification of Research in Priority Areas" (IRPA). During its first ten years of application the fund has been used to strengthen research capability in many areas, including health. This programme changed the face of research in the country.

The purpose of the IRPA programme is to focus R&D activities on areas which have the potential to enhance the national socio-economic position. Priority areas are developed in each of the 5-year Malaysia Plans. Research organisations and higher education institutions in the public sector are eligible under the IRPA programme to receive R&D grants. Private sector entities can participate in the programme in association with the above-mentioned organisations on industry-wide research projects.

In allocating grants several principles are adhered to. These are to:

- ◆ Fund projects which are of high national priority
- ◆ Fund projects which address the needs of Malaysian industry
- ◆ Encourage collaborative efforts among research institutions
- ◆ Enhance R&D linkages between the public and private sectors.

IRPA grants cover only research project expenses, including salaries of contract personnel. They do not, therefore, cover the costs of permanent staff. An IRPA Panel has to approve the application and determines the amount of the grant. Construction of infrastructure, such as buildings and laboratories, as well as the purchase of equipment related to these buildings/laboratories do not qualify for funding under the IRPA programme.

For the 7th Malaysia Plan, the Ministry of Science, Technology and the Environment, with the endorsement of the Cabinet, narrowed the IRPA mandate to only support R&D on "products that can be marketed". Given that only a small percentage of health research anywhere in the world will result in commercialisable products, this view clearly implies that a major part of essential health research in Malaysia will no longer be funded.

There are clear instructions on the form and procedure for application to these funds. All application forms must be screened and endorsed by the applicant's own institutional Research Committee prior to submission to the IRPA Secretariat. The applications are also evaluated by an Expert Panel of senior members of the research community prior to reaching the IRPA Panel.

The IRPA Health Sector Panel under the 7th Malaysia Plan (1996-2000) is composed of nine members with the Director-General of Health YBhg. Tan Sri Dato' Dr. Abu Bakar bin Suleiman, as Chairman. The DDG (R&ST), YBhg. Dato' Dr. Hj. Mohd. Ismail Merican has been a member since 1999. Six members are university professors and/or deans, and one member represents the private sector.

Since implementation of the 5th Malaysia Plan, the government has channeled more than RM2 billion towards research projects, out of which approximately 10% has gone towards supporting health research. See Table 1.

Table 1: Total IRPA allocation (RM) to health research and number of projects

Year	Allocation (RM million)	No. of Projects
1986-1990	33.6	295
1991-1995	49.4	414
1996-1998	62.1	335
Total	145.1	1,044

Source: Based on keynote address by the DG at the National Conference on Setting of Health Research Priorities, 24-26 October 1999. [Not corrected for inflation]

Besides the Health Sector Panel there are eight other panels including one on social science. It was not possible for the consultant to study the allocation of funds from this Panel, but it is stated that it rarely deals with health matters.

3.2 Ministry of Health

Staff from the Ministry of Health's Headquarters and the Malaysian States are entitled to apply for IRPA funding. They also have at their disposal operational funds in respective departments to carry out small-scale research. The total funds are limited and it was not possible for the consultant to look into the standard of research. When NIH becomes operational, an important first task will be to provide training to the various departments of the MOH in research design, data management, etc. The Health Systems Research (HSR) group of the NIH seems to have been very active in supporting HSR projects at the State level and some 200 are currently in progress.

3.3 Universities

The consultant was able to gather very little information on the research agendas of the various universities. Individual research grants have been allocated from IRPA and managed by respective universities. Whether it has also gone to research groups or to topics of interest to many universities is not known. It was observed that at least in one university, only 25% of the professional staff had any ongoing research activity. An important undertaking by the medical faculties seems to be clinical trials. More and more multinational pharmaceutical companies have approached various groups in Malaysia for collaboration in this field. Whether the medical faculties have the intention to collaborate in the future with the now established Clinical Research Centre (CRC) of the MOH is not known.

3.4 ENHR

In preparation for the introduction of the 7th MP, many different means were applied to ensure that priority health concerns were included in the Plan. If one takes "essential" to mean "the health research that a country cannot do without if they are to pursue health for their own people", the research community will have to assess the outcomes and impact of some of those means. The priority setting mechanism should be refined and all stakeholders involved. The civil society, non-governmental organisations, professional associations and the private sector are all important in expressing what type of research is needed. They are also among the main users of health research results. Malaysia would benefit from more attention to the 'demand-side'.

In summary, based on preliminary data analysis from the COHRED sponsored multicountry study on resource flows, the following picture emerges. Health R&D expenditure in 1998 represented 2% of total R&D expenditure. The figure is also declining as a percentage of health sector expenditure (see Table 2). If correct, this figure is a worrying sign, particularly given that the international recommendation for a government's health research expenditure is *no less than* two percent. Table 3 clearly shows that the IRPA funding has declined and that the pharmaceutical industry is taking an increasing role as funder. Health research has retained around 10% of total IRPA funding for 1999. However, non-earmarked funds for health research seem to be a necessity.

Table 2: Summary of Health R&D Expenditures in Malaysia (1997-1998)

	1997 (RM)	1998 (RM)
Health R & D Expenditures ¹	30,973,660	23,566,346
Total R&D Expenditures ²	NA	1,127,000,000
Total Health Expenditures	3,442,049,345	4,030,100,232
% Health R&D Expenditures / Total R&D Expenditures	NA	2.09 %
% Health R&D Expenditures/ Health Expenditures	0.89 %	0.58%

1. COHRED-funded study
2. National R&D Survey, MASTIC

Table 3: Health R&D investment in Malaysia (1997–1998)

Source of Fund	1997		1998	
	Amount (RM)	%	Amount (RM)	%
IRPA ¹	20,923,635	67.6	15,199,536	64.5
Other Govt. fund ²	5,427,348	17.5	3,592,931	15.2
Pharmaceutical industry ³	4,500,575	14.5	4,519,977	19.2
Other private Sector (NGO s foundation)	35,700	0.1	89,200	0.4
Foreign	86,402	0.3	164,702	0.7
TOTAL	30,973,660	100.0	23,566,346	100.0

Source: Preliminary results from Multicountry Resource Flows Study, funded by COHRED

1. Allocations only. Expenditure figures are not available from some institutions.
2. Figures are obtained from Ministry of Health only
3. Funds are for R&D conducted by government agencies, universities and the pharmaceutical companies themselves.

Chapter 4: Mechanisms for Health Research Funding

4.1 Priority directions

In preparation for the 8th MP both the MOH and IRPA have set research priorities through various consultative mechanisms. The two do not differ substantially and it is difficult to ascertain why IRPA would not be in the position to fund most health research proposals, should the present priorities be endorsed.

It should be noted that during the 7th MP the IRPA Health Panel initiated five programmes, so-called PIPs (Panel Initiated Programmes), which included micronutrients, dengue fever, health problems of foreign workers, case-mix methodology and promotion of healthy life style. These are said to have been successful programmes. It is not known how application and assessment was carried out on the PIP projects.

4.2 Project reviews

The individual researcher who is entitled to apply for IRPA funding must follow certain procedures. There are clear instructions on the content of the application etc., for possible IRPA funding. The application is then evaluated by the Research Review Committee of the MOH which is appointed by the Standing Committee for Medical Research within the MOH. The Review Committee has a clear mandate. For IRPA funding, it screens for completeness of application forms, and is required to state whether the project is a priority to the institution and the IRPA. Once the application has passed this level it goes for technical evaluation by one or two experts appointed by the Health Sector Panel. Finally, this Panel assesses the application on its merits to meet the national socio-economic development priorities and decides on the funding level.

At the university level members of the Research Review Committee are nominated and elected by the faculty. About two-thirds of applications are approved and passed to the IRPA. Each year, the Research Committee of the MOH processes around 40 new applications for IRPA funding, of which 80% are approved. Most projects are carried out at the IMR, and medical biotechnology and "vector-borne and other communicable diseases" dominate the picture. Based on a study of some 20 projects, unsystematically sampled, from the most recent year's funding round, the consultant agrees with decisions taken by the Review Committee. Generally speaking the formulation of research questions, the literature reviews and data management skills could be improved. The rejected projects do in general have an unsatisfactory design. The decisions made by the IRPA Panel also seem to meet reasonable standards, but the consultant was not in a position to study projects in detail. The total time from the day of application to getting information on decisions is 4-6 months - a very reasonable performance. However, funds are not available to the researcher for another 3-4 months since the MOH is not allowed to transfer funds until the following budgetary year. Both at institutional and IRPA levels, the reasons for rejection could be more clearly stated and shared with the applicant.

The picture painted above would lend itself to suggest that further training in research methodology is included in any future staff development plan.

Chapter 5: National Institutes of Health (NIH)

5.1 The concept

The National Institutes of Health (NIH) was introduced in the 7th MP in 1996 and endorsed by the government. The ideas behind the concept have slowly been understood and accepted. However, there is no corporate strategy and no budget line for NIH. It has, however, published two issues of a Bulletin during 1999 to inform researchers on progress and events.

5.2 The five Institutes

The combined human resources in the institutes are illustrated in Table 4. Annual reports from the Institutes are at best output oriented, but rarely cover outcome and stepwise impact. This could be accomplished if the proposed strategic planning exercise is undertaken.

Table 4: Human resources at NIH

INSTITUTE/STAFF	IMR	IPH	IHM	IHP	CRC	TOTAL
Total						
Approved	565	229	18	NA	14	826
Filled	441	154	9	2	3	609
Professional						
Approved	142	45	11	NA	7	205
Filled	92	36	7	2	2	139
PhD (or equivalent)	16	1	0	1	0	18

Institute of Medical Research (IMR)

During its first 50 years Institute of Medical Research (IMR) is said to have been a centre of excellence in tropical disease research. Over the last two decades the IMR is said to have lost its position. None of these statements are within the competence of the consultant to assess. Against the second, one could argue that WHO/TDR as well as the Western Pacific regional office of WHO continuously collaborate with IMR. If the first statement is true it might be explained by the fact that IMR was one of the few existing institutes focusing on tropical disease research in the first half of the last century. The second statement may, however, mean that IMR has not been able to recruit the modern scientists e.g. molecular biology competent, needed for today's research. Judging on an international yardstick - PhDs - the number of qualified senior researchers being 15% of the professional staff is surprisingly low.

The IMR is the only institute that regularly publishes in internationally refereed journals. It is, however, difficult to pinpoint any particular area of outstanding competence. IMR would probably benefit from a much clearer focus. In deciding its future, the IMR should also pay attention to the research carried out at the universities, so that a complementary agenda may be drawn up. This would make it possible to be at the cutting edge in a few areas. Resources will be insufficient to carry out uncoordinated individual, researcher driven agendas.

The IMR also has a role in service and training. The service load relating to the number of laboratory specimens has declined in the last few years, in principle freeing-up time for research. The training courses at basic level may be "outsourced" to make it possible to focus on postgraduate training and research. It would be important to assess each staff member's time allocation to their various tasks, beginning with those who hold a PhD.

The IMR has a number of experienced epidemiologists, mainly qualified in investigating infectious disease outbreaks. Together with the Institute of Public Health (IPH) and the CRC there needs to be an analysis of the total competence covering all areas of epidemiology, including clinical epidemiology and intervention epidemiology.

Institute of Public Health (IPH)

The Institute of Public Health (IPH) was established four decades ago for undergraduate training of sanitary engineers, health inspectors and some other public health cadres.

The institution does not yet have an established record as a research institute. It will be a difficult task to change the culture from solely teaching to its suggested focus on research. The HSR component is the strongest and is well recognised, not only by WHO, but also in wider circles. However, human resources are limited - given the assumption that a major part of the ENHR concept is that it will utilise the competence of the existing HSR staff. The IPH has undertaken the responsibility of stimulating HSR in the various Malaysian States and this time-consuming investment should bear fruit in the coming years.

The IPH could play a crucial role in the quality control of national registers. For planning purposes one needs not only prevalence data of diseases, but incidence data as well. A further source of information for formulation of research questions would be to examine reasons for differences in e.g. morbidity and health service utilisation between the Malaysian States or even "small area variation".

The IPH could also continue its focus on stimulating nursing research - originally a HSR activity. Caring science is becoming more and more established in the West, not least due to the demand from the ageing population. Nurses are the main providers of health services in many developing countries. For these countries, as well as for industrialised countries, this field of research has come on the agenda for essential national health research.

Clinical Research Centre (CRC)

The Clinical Research Centre (CRC) aspires to become a network of clinical settings within public hospitals. At the National Hospital in Kuala Lumpur the CRC has been allocated a number of beds and staff. The CRC has also appointed directors and two managers. A major task so far has been to carry out clinical trials. The consultant learned that it is easy to recruit clinical researchers, however there is often a scarcity of clinicians interested in research. It seems as if a newly graduated physician has very little knowledge in research methodology and almost no experience of research. Based on a discussion with a group of medical students in the first to fifth year it is the opinion of the consultant that the wish to strive for a research career is extremely rare. This is in astounding difference from the situation in Europe and North America. What could be the reason and does it have any implications for the future?

Preclinical subjects are being taught more and more by scientists without a medical degree. This is the case in Malaysia as in many other countries. It has caused great concern abroad and a number of efforts have been undertaken to change the situation. Problem-based undergraduate education, applied at many universities in Malaysia, addresses this problem. Some medical faculties in other countries have embarked upon new courses combining scientific training with medical education from the first year, in the hope that this will stimulate the recruitment of scientifically trained clinicians as well as preclinical teachers with medical knowledge. It is also based on the assumption that a good clinician needs a scientific mind and that a good teacher needs to carry out research. The compartmentalisation of tasks in the Malaysian system, and the fixed salary scale irrespective of scientific prominence are other factors working against the active recruitment of young students into medical research careers.

Institute of Health Management (IHM)

This Institute has been growing gradually over the last 10 years. It will soon have its own building and new staff are being recruited. The emphasis by the MOH for IMH has, at times, been teaching - at other times research. It is obvious that further development will be dependent on which direction is chosen. Currently, IHM has no staff members with research experience.

Institute of Health Promotion (IHP)

This is the smallest, and most recently established of the research Institutes. It was expected that some the staff of the department of health education within the MOH would join IHP. However this has not materialised. Only the Director has research experience, and would require immediate support in a variety of aspects.

5.3 Research capability

The above reasoning leads to an attempt to assess the present research capacity of the NIH. The five Institutes which constitute the NIH are extremely variable in age, size, and experience. Anywhere in the world, this situation would cause managerial problems. It could be argued today, as was done in a consultancy report five years ago, that the Institutes should have another composition than is the case at present. Further, it does not seem necessary that the MOH makes an important programme area an Institute in order to guarantee its continuation. Other support mechanisms could be put into place.

At least two of the new institutes, IHM and IHP, will have at least a five year growth period before they can be looked upon as reasonably competent. The concept of the NIH and its five Institutes has been generally well accepted, however. The interpretation of the term "Institute" is not clear to most staff members of the various Institutes. It is taken by the consultant to mean a group of researchers with back-up staff and a budget of its own.

5.4 Strategic planning workshop

A one-day workshop organised by the consultant was attended by 15 senior researchers. The consultant had prepared a five-page background document with group exercises as well as definitions of common terminology used in strategic planning work.

The objective of the workshop was to illustrate certain crucial points in the process towards accomplishing a strategic plan.

As only one day could be set aside for the exercise, the consultant chose four of the eight essential steps for discussion in the workshop. These four were Programme Focus; Programme Development and Monitoring; Resource Planning and Management; and Management of Strategic Change.

Most participants were familiar with the steps in the development of a strategic plan. No one seemed to have undertaken the whole exercise previously, however. The three workshop groups were deeply engaged in the five exercises and presented their results to the plenary. Time did not allow for making an effort to combine or condense these group suggestions.

At the end of the workshop consensus was reached that the time was ripe to begin work on a strategic plan for the NIH. The Institute Directors and the consultant were requested to communicate this wish to the DDG (R&TS) and the DG. For further information see Annex 4.

Chapter 6: General Discussion

Malaysia is a newly-industrialised country with an impressive growth rate. The sustainability of achievements in development, and the new challenges the country is facing call for innovative thinking.

The Malaysian government has taken bold steps in stimulating R&D in many fields, including health research. An institute conducting research on tropical diseases had existed long before independence. The next step of investment in R&D came with the establishment in the 1960s of medical faculties within the university structure. The preclinical and clinical research developed of its own volition, and was generally researcher-driven. In the 1960s, the MOH created an Institute for Public Health, the main activity of which was teaching. The research agenda of this Institute has gradually developed. In the 1980s WHO advocated the development of Health Systems Research within public health. The MOH has continued to stimulate relevant health research through the creation of independent institutes. Three of them are now under development.

Within the MOH structure both HQ programmes and the (Malaysian) States have been encouraged to identify health research needs, carry-out individual small-scale projects, and participating in national level projects.

In 1998 MASTIC carried out the third phase of a study on public awareness of science and technology in Malaysia. The method employed was a stratified multi-stage random sampling technique whereby 5000 respondents were interviewed face-to-face. The study shows that the majority of Malaysians still hold positive views on the role of R&D in improving quality of life. However, by international standards the knowledge base is below average, according to the report. Furthermore, on the issues of new medical and scientific discoveries, Malaysia ranks 13th in a sixteen-nation comparison.

Understanding what the general public expects from health research is often difficult to pinpoint. A contribution might come from a study currently being carried-out by the IPH. As part of an international project "Medicine in the Future", the project will identify the goals, values and expectations of medicine. Thus the need for health research might possibly be translated into demand. The MOH, aware of the importance of consultations, has embarked on an ambitious dialogue between its representatives and the research community. In July 1999 such a Research Dialogue was held in conjunction with the Second Scientific Meeting. The general objectives of the meeting were to identify MOH priority research areas for the 8th MP.

The outcome of this exercise was a list of research areas considered to be of future importance. The list has many similarities with the present plan. It covers almost every type of research and illustrates how difficult it is to maintain focus. It is the opinion of the consultant that the plan has not lead to defining Essential Malaysian Health Research. As in most health research systems, it has been hard to say no to interesting suggestions from specialists. Furthermore, there seems to be no linkage between different types of research, e.g. there is no feedback from the community experience or from the health care system to the basic sciences, be they molecular biology or anthropology.

Ministries of Health in many countries have established registers on common health problems or diseases. Malaysia is yet to organise this on a sufficient scale. Such registers are often used by epidemiologists and HSR scientists to generate hypotheses, to make secondary analyses as well as to combine two registers to get new ideas for predictive variables, etc. Thus, routinely kept registers (of good standard) are important elements in health research.

It is said that only 3% of Malaysia's GNP is spent on health care, a remarkable figure seen in the perspective of very good indicators of health status. The demographic development and the epidemiological transition will demand that in the near future more resources will have to be spent on

chronic disorders and the elderly. The almost total absence of health economic studies is worrying, if taken to mean that the research community has not prepared itself for the coming tasks.

The Malaysian MOH is well equipped with health researchers. The MOH takes a lead role in formulating the government's health research policy - something that is rarely seen in Western countries. The MOH has also in various ways encouraged a dialogue with the universities. However, it has not yet led to closer collaboration. Essential health research activities are yet to take place in the old and new Institutes of the NIH.

In order to fulfil its expected tasks the NIH requires a major effort in research capacity strengthening. There are a number of administrative rules that do not support, and sometimes hinder, the development of a research culture. However, it does seem possible to act upon these rules within the present system. Other actions should be geared towards focusing research on priority areas and strengthening the NIH in weak areas.

Within one to two years, the NIH will require its own full-time Director to lead research development. The Director should have an Advisory Group at their disposal. The members of the group should be first class scientists of international status appointed in their individual capacity. The management of the NIH should be given to a Directorate. In preparation for the 8th MP, it is proposed to create some 50 new posts to manage the NIH. There does seem to be a need for administrative support staff but that research management should, on the whole, be undertaken by the researchers themselves and looked upon as honorary assignments. Joint research activities should be in place before a major investment in management is made.

In a long-term perspective the staff overwhelmingly supports the idea of corporatising the NIH. There would be many advantages of doing this, but the competence of the NIH will first have to be ascertained. A contract between the MOH and the NIH should also be developed to safeguard social responsibility of the NIH and guarantee that non-profit research is also carried out.

There is no doubt that the creation of the IRPA programme paved the way for health research development in the country. In the long term however, the IRPA mandate and national health research needs do not complement each other. In most countries, government allocation to health research would be of a more general nature, and the distribution of funds operated by the research community itself. This could be achieved for example, through a Health Research Council with members representing the government, the public and with a majority of scientists from different disciplines. The screening process for applications should be transparent and build on the experience of the IRPA and institutional review committees.

In addition, governments might, for limited time periods, allocate extra funds to emerging priority areas. HSR is recognised as an important field of research, as part of ENHR. Health sector reforms, health financing and health behaviour changes are important issues in every country. Many governments have thus acknowledged the need to stimulate HSR to address the above issues. A small percentage of available funds for health services has been earmarked for HSR.

Chapter 7: Conclusions

The achievements in health and health research in Malaysia are impressive. Compared to many other countries the status of a researcher is not high. Certain societal and administrative structures that have worked well in other development areas in the country are not supportive of research. The compartmentalisation of many tasks is a hindrance for long-term collaborative research.

Over the last 15 years, health research has been stimulated by its share of government allocation to R&D. The many new fields for government investment in R&D and the very specific mandate of IRPA will lead to a further decline in funds available for health research, particularly the non-laboratory based sciences. Public health, behavioral and clinical sciences will probably suffer at a time when the research community is ready to undertake studies, essential for further development. The consultant is thus very supportive of the request for a new government allocation to health research.

The MOH has at its disposal a great variety of institutions and individuals to carry out research. Foremost among them are the five Institutes which constitute up the new NIH. The research capability is good in some areas but inadequate in others. In order to utilise the combined resources of the Institutes, the NIH will need to develop a corporate strategic plan. Organisational structures would then follow to support the mission and objectives of the NIH. Meanwhile, a number of small steps could be taken to create a productive research climate.

Chapter 8: Recommendations to the Ministry of Health

8.1 Short-term

- ◆ Request that government earmark further funding for operational budgets and health research which is complementary to the IRPA
- ◆ Complete the establishment of the NIH legally, financially and administratively
- ◆ Develop a strategic plan for the NIH
- ◆ Bring all instructions for the five Institutes in line and be clear what teaching and services are expected
- ◆ Allow the NIH to carry over funds to the next budgetary year
- ◆ In order to strengthen the capability of the NIH and to foster a research culture the following should be implemented:
 - Appoint a research director
 - Allow transfer of resources, both human and financial, between the Institutes, in order to immediately establish joint activities
 - Decide on 1-3 topics for joint research by all Institutes
 - Avoid demanding new organisational structure before the strategic plan is endorsed
 - Recruit new senior staff in professional fields that are presently weak or absent
 - Grant fellowships in the same fields as above
 - Strive for more staff with PhD qualifications
 - Scrutinise assessment criteria for researchers to include qualitative merits and research management
 - Encourage collaboration with universities and other institutes (particularly relevant for IHM and IHP)

8.2 Long-term

- ◆ Should new health research funds be granted, there is a need to establish a research review mechanism
- ◆ Put in place (jointly with the universities) a mechanism to monitor resource flows for health research
- ◆ Take necessary steps towards corporatisation of the NIH
- ◆ Focus NIH to complement universities in health research and select areas where NIH could be at “the cutting edge”
- ◆ Initiate discussions with universities and central authorities on salary scales for health researchers
- ◆ Promote the right of researchers to hold both MOH and university positions
- ◆ Continue and further develop dialogues between the general public, government, private health systems and the researchers in order to improve on the definition of Essential Malaysian Health Research
- ◆ Consider how to accommodate the private sector in the NIH
- ◆ Establish a new university course blending training in basic sciences and medicine.

Chapter 9: Recommendations to COHRED

- 9.1 The funds allocated to the multi-country resource flows study have been well utilised in Malaysia as new information has surfaced. The MOH and the universities now need to establish a mechanism whereby it is possible to refer annually to both allocation and expenditure figures. There might be a need for further assistance to implement such a system. In spite of this, by necessity being context specific, there are successful schemes in many countries and a COHRED booklet based on "Lessons learned" would probably be welcomed in many quarters. The multi-country team should be encouraged to present their findings at the international conference in Bangkok in October 2000.
- 9.2 To understand if funding for ENHR is leveling off or perhaps even declining in Malaysia one has to look for many types of information. The definition of ENHR in Malaysia is not yet clear and further national efforts are needed in this respect. The main source of funding for health research is the government IRPA mechanism. Its mandate is very specific and will never meet the objectives of ENHR. It is the opinion of the consultant that the health research community should be satisfied that it has received so much funding in spite of the non-matching priorities. The joint capacity of the research community to carry out some important areas of research such as health systems research and epidemiology studies is limited. Even basic biomedical research needs a clearer focus to bring it in line with ENHR thinking. The specific situation in Malaysia with respect to all of the above areas makes it difficult to draw any general conclusions. Health research funding in Malaysia requires, as is argued by the MOH and the consultant, new government allocations.
- 9.3 The NIH concept was launched some five years ago and is gradually being understood at all levels. Three new Institutes have been created and two established ones have been given new agendas. The resources, both human and financial, are extremely diverse. Such a situation would create great difficulties anywhere. The means of creating a new functional entity are manifold and hitherto not systematically applied. The one-day strategic planning exercise, facilitated by the consultant, was met with a good response by senior researchers and managers. At the meeting where the consultant's draft recommendations were discussed, it was endorsed to carry out all the work needed to achieve an NIH strategic plan.

Chapter 10: Acknowledgements

The tasks of the consultant could not have been accomplished without the generous cooperation of many people. To all those, who gave time, information and ideas, the consultant expresses his great appreciation.

Particularly, thanks go to the officers who facilitated this study: Dr Ho Tze Ming, Secretary Standing Committee Medical Research, IMR; Ms Ten Sew Keoh, Secretary, Research Review Committee, IMR; Ms Asmaliza Ismail, Research Officer, Environmental Health Research Institute, IMR; and, Ms Normah Mahmud, Secretary of the WHO Regional Centre for Research and Training in Health and Tropical Diseases, IMR.

Chapter 11: References

- Alano BP and Almario AS (2000) *Tracking Country Resource Flows for Health Research and Development (R&D): A comparative report on Malaysia, the Philippines, and Thailand with a manual on Tracking Country Resource Flows for Health Research and Development*. Centre for Economic Policy Research, Manila.
- COHRED (1997) *Essential National Health Research and Priority Setting: Lessons Learned*. COHRED Working Group on Priority Setting, COHRED Document 97.3, Geneva.
- COHRED (1994) *Research Capacity Strengthening for Essential National Health Research (ENHR)*. AO Lucas, D Rowe and the Working Group on Research Capacity Strengthening, Task Force on Health Research for Development, COHRED: Geneva.
- Harvey R & Doherty R (1995) *Malaysia Health Development Project Technical Assistance on the National Institutes of Health*. World Bank Consultancy, September 1995.
- Johnson G. & Scholes K (1984) *Exploring Corporate Strategy*. 5th Edition, Prentice Hall, Europe, (1999 edition ISBN 0-13-080739-7).
- Malaysian Medical Association (1999) *Health for All: Reforming Health Care in Malaysia*.
- MASTIC, (1999) *Public Awareness of Science and Technology in Malaysia 1998*. Ministry of Science, Technology and Environment, June 1999.
- Ministry of Health (2000) *Research Priorities for the 8th Malaysia Plan*; See Appendix 1.
- Ministry of Health (2000) *Proposed IRPA Research Priorities for the 8th Malaysia Plan*; See Appendix 2.
- Ministry of Health (1996) *Research Activity Ministry of Health Malaysia*; Annual Report 1996.
- Ministry of Health (1997) *Research Activity Ministry of Health Malaysia*; Annual Report 1997.
- Ministry of Health (1998) *Research Activity Ministry of Health Malaysia*; Annual Report 1998.
- National Institutes of Health (1999) *NIH Bulletin*, Volume 1 No. 2, October 1999.
- National Institutes of Health (1999) *NIH Bulletin*, Volume 1, No 1, June 1999.
- Tan Sri Dato' Dr Abu Bakar Sulaiman (1999) National Conference on Setting of Health research Priority for the 8th Malaysia Plan, 24-26 October 1999.
- Ten Sew Keoh (1999) "Resource Flows for Health Research and Development". Preliminary data from the COHRED-funded study in Malaysia, the Philippines and Thailand.

Annex 1

Terms of Reference

A. Funding for ENHR

Problem statement

It is anticipated that in view of current developments in research funding mechanisms, especially at the national level, there will be inadequate funds for ENHR.

Objective of consultancy

To review existing health research funding mechanisms and to recommend strategies for optimising an increasing funding for ENHR.

Expected output

At the end of the consultancy, the consultant is expected to produce a report on the following:

1. Situational analysis of how ENHR is currently funded in Malaysia;
2. Situational analysis of current health research funding mechanisms in Malaysia, in relation to ENHR; and
3. Recommendations on strategies for optimising and increasing funding for ENHR.

Process

The process for obtaining relevant information in preparation of the expected output is at the discretion of the consultant. It can be by interviews, questionnaire survey, and/or formal discussions at a national forum. The Ministry of Health Malaysia will provide the necessary financial and human resource support to conduct whichever process decided on by the consultant.

Timeframe for activities

Week 1:	Briefing on how health research is conducted in Malaysia. Formulation of strategies and tools for collection of relevant information
Week 2:	Collection of relevant information and data
Week 3:	Analysis of information and data collected
Week 4:	Hold discussions with relevant personnel Preparation and presentation of report

Qualification of consultant

The consultant should have vast experience in the formulation of policies for health research funding.

The consultant should be able to interact well with researchers, health managers and fund administrators.

B. Strategic Planning for NIH

Problem statement

Currently, there is no strategic plan that links the activities of components of the NIH towards a common goal or vision.

Objective of consultancy

To enable a process suitable and appropriate for strategic planning in the NIH.

Expected output

At the end of the consultancy, the NIH shall be equipped with a process or tool for the development of strategic plans.

Process

The consultant will conduct a workshop to introduce and train senior staff of the NIH in the process of strategic planning.

Timeframe for activities

Week 1:	Briefing on the NIH and its component Institutes;
Week 2:	Preparation of workshop programme and educational materials;
Week 3:	Conduct workshop; and
Week 4:	Preparation of Workshop Report.

The Ministry of Health will provide the financial, infrastructure and human resource support for organisation of the workshop.

Qualification of consultant

The consultant should have vast experience in strategic planning and be an experienced trainer.

Annex 2

Work Programme

Date of consultancy: 14 February-3 March and 13-17 March 20000
(1 month)

Week 1 (14-20 February 2000)

14 Feb, 09h00 hours	Discussion with the Deputy Director-General of Health (Research & Technical Support)
14 Feb, 11h00 hours	Discussion with the Director-General of Health Malaysia
Formulation of strategies and tools for collection of relevant information on health research.	
16 Feb, 12h00 hours	Discussion on health research and funding, with the Dean of Medical Faculty of the National University of Malaysia (Universiti Kebangsaan Malaysia, UKM)
17 Feb, 10h00 hours	Discussion with the Science and Technology Director, Ministry of Science, Technology and the Environment Malaysia, on IRPA funding for the health sector

Collection of relevant information and data on health research funding.

Week 2 (21-27 February 2000)

21 Feb, 09h00 hours	Discussion and briefing with the Deputy Director-General of Health (Research and Technical Support), Ministry of Health, Directors of the National Institutes of Health, and State Health Service Directors on: <ul style="list-style-type: none">◆ How health research is conducted and funded in Malaysia/MOH; and◆ NIH and its components institutions
22 Feb, 0900 hours	Discussion on health research and funding, with the Dean of Medical Faculty, University of Malaya

Preparation of strategic planning workshop programme and materials.

Week 3 (28 Feb-5 March 2000)

29 Feb, 0900 hours	Conduct a strategic planning workshop for NIH Directors and senior officers
--------------------	---

To develop draft strategic plan framework for NIH.
Compile and analyse health research funding data.

Week 4 (13-19 March 2000)

Develop draft strategic plan framework for NIH.

Prepare report on funding for ENHR

16/17 March

Presentation of strategic plan framework and funding for ENHR to the Director-General of Health Malaysia, Deputy Director-General of Health (Research and Technical Support), Directors of the National Institutes of Health, Deans of Medical Faculties from the University of Malaya (UM) and the National University of Malaysia (Universiti Kebangsaan Malaysia, UKM) and the Director of Science and Technology, Ministry of Science, Technology and Environment.

Annex 3

Individuals Consulted

1. Tan Sri Dato' Dr Abu Bakar Suleiman
Director-General of Health
Ministry of Health Malaysia
2. Dato' Dr Mohd Ismail Merican
Deputy Director-General of Health
(Research & Technical Support)
Ministry of Health Malaysia
3. Dr Lye Munn Sann
Director
Institute for Medical Research
Ministry of Health Malaysia
4. Dr Suleiman Che Rus
Director
Institute of Public Health
Ministry of Health Malaysia
5. Dr Teng Seng Chong
Director
Institute of Health Management
Ministry of Health Malaysia
6. Dr Haliza Mohd Riji
Director
Institute of Health Promotion
Ministry of Health Malaysia
7. Dr Lim Teck Onn
Consultant Nephrologist
Clinical Research Centre
Hospital Kuala Lumpur
8. Dr Ding Lay Ming
Research Officer, Clinical Research Centre,
Hospital Kuala Lumpur
9. Professor Dato' Dr Anuar Zaini
Dean
Faculty of Medicine
University of Malaya
10. Professor Dr C.C. Lang
Deputy Dean, Research & Development
Faculty of Medicine
University of Malaya
11. Professor Dr Lai-Meng Looi
Deputy Dean, Department of Pathology
Faculty of Medicine
University of Malaya

12. Dr Mustaza Haji Ahmadun
Director, Science & Technology Division
Ministry of Science, Technology & Environment Malaysia
13. Dr Amal Nasir Mustafa
Senior Researcher, Epidemiology Division
Institute for Medical Research
Ministry of Health Malaysia
14. Dr Maimunah Abdul Hamid
Head, Health Systems Research
Institute of Public Health
Ministry of Health Malaysia
15. Dr Rugayah Bakri
Research Officer, Health Systems Research
Institute of Public Health
Ministry of Health Malaysia
16. Dr Azman Abu Bakar
Research Officer, Health Systems Research
Institute of Public health
Ministry of Health Malaysia
17. Dr Foo Li Chien
Senior Research Officer &
Member of the Research Review Committee
Ministry of Health
18. Medical students
University of Malaya

Annex 4 Workshop Report

Report on the Strategic Planning Workshop for NIH Directors and Senior Officers

29 February 2000

**Institute for Medical Research
Ministry of Health Malaysia**

**Dr Goran Sterky
COHRED Consultant**

Strategic Planning Workshop For NIH Directors and Senior Officers 29 February 2000

The workshop was organised by the COHRED consultant, Dr Goran Sterky. A five-page background document with group exercises as well as definitions of common terminology used in strategic planning work was prepared by the consultant.

The objective of the workshop was to illustrate certain crucial points towards accomplishing a strategic plan.

As only one day could be set aside for the exercise, the consultant chose four of the eight essential steps for discussion in the workshop. These four were Programme Focus; Programme Development and Monitoring; Resource Planning and Management; and Management of Strategic Change.

Most participants were familiar with the steps in the development of a strategic plan. No one seemed to have undertaken the whole exercise previously, however. At the end of the workshop it was agreed that the time was ripe to begin work on a strategic plan for the NIH. The Institute Directors and the consultant were requested to communicate this wish to the DDG (R&TS) and the DG.

The three workshop groups were deeply engaged in the five exercises and presented most of the results to the plenary. Time did not allow for making an effort to combine or condense the groups suggestions.

This report gives the background to each exercise. The groupwork reports are with the IMC organisers. The report aspires to stimulate further discussion of the issues within the NIH. It might also be useful as a starting point in the forthcoming efforts to develop an NIH strategic plan.

March 2, 2000

Exercise 1	Draft the vision and mission for NIH
Exercise 2	List the values and principles that should be developed and or adhered to in the NIH
Exercise 3	Make a SWOT analysis of NIH
Exercise 4	State the corporate identity of the NIH
Exercise 5	<ul style="list-style-type: none">◆ Should the NIH work with the private sector and if so, how?◆ Should there be a push for corporatisation?◆ Discuss the future leadership of NIH◆ List professions to be recruited◆ List research topics that could immediately engage all five Institutes
Appendix 1	List of participants
Appendix 2	Background document

Appendix 1

List of participants

Workshop Group I

1. Dr Lye Munn Sann (IMR)
2. Dr Sulaiman Che Rus (IPH)
3. Dr Haliza Md Riji (IHP)
4. Dr Jasvinder Kaur (IPH)
5. Dr Wan Nazaimoon (IMR)

Workshop Group II

1. Dato' Dr Zaki Morad (CRC)
2. Dr Tee E Siong (IMR)
3. Dr Maimunah Hamid (IPH)
4. Dr Azman Abu Bakar (IPH)
5. Mr Halim (IHM)

Workshop Group III

1. Dr Teng Seng Chong (IHM)
2. Dr Hanjeet Kaur (IMR)
3. Dr Rugayah Bakri (IPH)
4. Dr Ding Lay Ming (CRC)
5. Ms Sumarni Mohd Ghazali (IHP)

Secretariat

1. Dr Ho Tze Ming
2. Ms Ten Sew Keoh
3. Ms Asmaliza Ismail
4. Ms Suhaili Abu Bakar

Appendix 2

Background Document

- Facilitator:** Goran Sterky
COHRED Consultant to MOH
- Objectives:** To illustrate important steps in a strategic planning exercise.
- Output:** All participants will participate throughout the workshop.
- Outcome:** Participants will be requested to carry out a strategic planning exercise at the institutional level.
- Impact:** A draft strategic plan will be available for the NIH by August 2000.

A *strategy* is the direction and scope of an organisation over the long term. Thus for our workshop, I suggest we use **Health for All In Malaysia by 2020**.

Exercise 1:

- I. Most Institutes have their own **vision** and **mission** statements. We will examine them in plenary and then split into groups to draft vision and mission for NIH.

Strategic management includes strategic analysis, strategic choice and strategy implementation.

- ◆ Strategic analysis is concerned with understanding the strategic position of the organisation in terms of its external environment, internal resources and competence, and the expectations and influence of stakeholders.
- ◆ Strategic choice involves understanding the underlying bases guiding future strategy, generating strategic options for evaluation and selecting from among them.
- ◆ Strategic implementation is concerned with translation of strategy into organisational structure and design, resource planning and the management of strategic change.

Formalised planning can be useful in various ways:

It can provide a structured means of analysis and thinking; it can be used as a way of involving people in strategy development, therefore helping to create ownership of the strategy.

Strategies are more or less successfully implemented through people. Their behaviour will not be determined by plans. So the cultural and political dimensions of organisations has to be taken into account.

Organisational culture is the deeper level of basic assumptions and beliefs that are shared by members of an organisation, that operates unconsciously and basically define, an organisation's view of itself and its environment.

A political view is that strategies develop as the outcome of processes of bargaining and negotiation among powerful internal or external interest groups (or stakeholders).

Exercise 2:

- II. There are **values** and **principles** that we want to develop or adhere to in the new NIH. A task of the groups will be to list them.

Assuming that the NIH will be a learning organisation, what does this mean in practise? A learning organisation is capable of benefiting from the variety of knowledge, experience and skills of individuals through a culture which encourages mutual questioning and challenge around a shared purpose or vision.

(It is worth noting that there is an underlying assumption in much management literature that consensus is a “good thing” because it facilitates collective action and a clear understanding about strategy. However, the evidence on this is equivocal. It can be argued that a lack of consensus encourages challenge, questioning and experimentation).

Exercise 3:

- III. A SWOT (Strengths, Weaknesses, Opportunities, and Threats) analysis summarises the key issues from an analysis of the environment and the strategic capability of an organisation. Up to eight key points can be listed for each of the factors.

Exercise 4:

Following exercise 1 to 3, we should be able to state clearly what we want the NIH to be known for.

- ◆ Why are we in business=health research?
- ◆ What is unique about the NIH?
- ◆ What will be our logo?
- ◆ What will our corporate identity/image be?
- ◆ What is our marketing strategy?

(In his address for the 8th Malaysia Plan in October 1999, the DG stated that “the opinions, role and participation of the community must now be taken into consideration as much as possible, in the planning and implementation of research projects”. Suppose the NIH takes this seriously, would we then say: “Health research with and for the people of Malaysia?”

This might be said to be a part in differentiation strategy which tries to answer who the customer is).

IV. Programme focus

V. Programme development and monitoring

VI. Organisation and management

Strategic changes do not take place simply because they are considered desirable; they take place if they can be made to work and put into effect by members of the organisation.

The important issue of organisational design from a strategic viewpoint is where, within this structure, strategic and operational decisions will be made.

There are many different basic structural types e.g.

- ◆ The functional structure
- ◆ The multidivisional structure
- ◆ The matrix structure
- ◆ The virtual organisation (held together not through formal structure and physical proximity of people but by partnership, collaboration and networking.)

Managers asked to describe their organisation usually respond by drawing an organisational chart, in an attempt to map out the structure. These structures are like skeletons: they define the general shape and facilitate or constrain certain activities. It should be remembered that an organisation's performance will be mainly influenced by how the 'flesh' is built onto this skeleton. In other words, it is a matter of organisational design. It consists of three elements:

1. Centralisation vs devolution
2. Organisational configuration
3. Resource allocation and control processes.

A drive towards greater devolution is largely a reaction to previous over-centralisation. If organisations are to benefit from increased devolution there is a critical question which also needs to be answered: what value does the centre of the organisation add to the activities of these separate parts? The radical question is: Do we need a centre at all?

There are three broad types of control:

1. Administrative control, through systems, rules and procedures
2. Social control, through the impact of culture on the behaviour of individuals and groups
3. Self-control, which people exert over their own behaviour.

The NIH concept was established in the 7th Malaysia Plan. In the draft of the 8th Malaysia Plan there is a proposal on the establishment of a Directorate to coordinate financial and administrative processes of the NIH. Its task is mainly to coordinate research management and act as secretary to various committees. It is proposed that 50 new posts will be created comprising 14 Management and 36 Support staff.

Exercise 5:

For the purpose of our workshop a number of questions can be asked.

1. In many parts of the world the delivery of health services is not solely a responsibility of the MOH. A public/private mix is now common. The situation in Malaysia today is about 50:50. However, by the year 2020, it will probably be 30:70. The MOH will have to assume a new role with implications also for health research. Should the NIH include the **private sector**? If so, how?
2. There are many practices and procedures within the government sector that are not lending optimal support to health research. Some of them might be dealt with by corporatisation. Should only some of the NIH Institutes strive for **corporatisation**, or should the entire NIH be involved?

A subset of the above would be to establish a **Trust Fund**. What can/can't it accomplish?

3. Assuming that the main function of the NIH is to carry out first class health research appropriate to the country's needs one could argue that the NIH Director should be a full-time internationally acknowledged scientist. Such a post should be widely advertised - preferably internationally - so as to attract Malaysian scientists working abroad, and given a competitive salary. The DDG (R&TS) has naturally acted as the Director during the establishment of NIH. He is the main interpreter of the health research needs of the public through MOH. The DDG represents the demand side as well as the utilisation side and it might be argued that there is an inherent conflict of interest if he is also charged with the implementation of the research agenda. Which type of **leader** does the NIH need?
4. The NIH will need a **Research Review Committee**. Should the present MOH committee continue to act for the NIH or be dismantled and a new body be established? Should each of the Institutes nominate members and the Director appoint them?
5. One justification for the many new posts proposed in the Directorate is that many **management** functions are at present undertaken by various officers of the Institutes, who have to sacrifice part of their research roles. However, in many institutions round the world such tasks are looked upon as honorary assignments and part of your training for research management. Thus, what is the real need for extra management staff if the research culture of the NIH is the correct one?
6. The 5 Institutes constituting the NIH vary markedly: in age (from 100 years to 1 year), and number of staff (> 400 - 2). Each Institute has been given research, training and service tasks by the MOH. The balance between those tasks varies and is not always clear. The instructions should be scrutinised to fit the mission of NIH by 2020. The collective strength of the NIH Institutes is good in some areas but inappropriate in others. From Exercise 3 it should be possible to derive which **professions** need to be introduced or strengthened. Please list them.
7. To foster collaboration and team work it is important to do things together. List in order of priority, the **research topics** that can begin operating this year with the available combined staff of the Institutes. Look upon this exercise as a means of strengthening the weakest Institutes.

VII. Resource planning and management.

VIII. Management of strategic change.

In order to accomplish a strategic plan for NIH by August 2000 it is proposed that a facilitator is recruited from outside the NIH. There should be one secretariat (with a core of 3 staff members) overseeing the process. The estimated total time is at least 6-10 full-time working days distributed over a 6 month period.

Recommended further reading:

Gerry Johnson, Kevan Scholes: *Exploring Corporate Strategy*.

Fifth Edition, 1999. Prentice Hall Europe.

ISBN 0-13-080739-7 (text only)

ISBN 0-13-080740-0 (text and cases)