

IDRC

Program Directions

Health Sciences Division

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1271164



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October 1980

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*La edición española de esta publicación también se
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Introduction to IDRC

The International Development Research Centre is unique among international institutions. Funded by an annual grant from the Parliament of Canada, the Centre is an autonomous organization whose policies are set by an independent board of governors representing Canada, the industrialized nations, and the Third World.

In 10 years of operations, the Centre has funded more than 900 projects in 100 countries. With its headquarters in Ottawa, the Centre has regional offices in Africa (Dakar and Nairobi), Asia (Singapore), Latin America (Bogota), and the Middle East (Cairo).

The Centre's aim, according to its statutes, is to "initiate, encourage, support and conduct research into the problems of the developing regions of the world and into the means for applying and adapting scientific, technical and other knowledge to

the economic and social advancement of those regions". It does this through providing support for Third World scientists and institutions to carry out research on subjects they feel are important in their own national context. Centre staff provide guidance in identifying and developing research projects, and assistance where necessary in the execution of the research.

There are four program divisions in the Centre, one of which is the Health Sciences Division. The other three are Agriculture, Food and Nutrition Sciences, Information Sciences, and Social Sciences.



Health Sciences Division

It is one of the basic tenets of the World Health Organization that “enjoyment of the highest attainable standard of health is one of the fundamental rights of every human being. . .” However, approximately half the world’s 4.4 billion human beings live in the rural areas of the developing world, and are for the most part effectively beyond the reach of “modern” medicine.

The gap in health standards is wide. In Africa the infant mortality rate is 142 per thousand births, compared with 21 in Europe. Life expectancy for an African is 49 years, for a European it is 72 years. For every doctor in Africa there are 5700 people, in Europe just 570. And even these figures do not convey the gap within the developing countries themselves, where most of the doctors and hospitals are to be found only in the cities. Nor do they mention the hundreds of millions of people in the developing world who are burdened most of their lives with one or more tropical diseases.

Obviously the fundamental rights to health are still denied to a large portion of humanity. Equally obviously, the limited resources of the Health Sciences Division

of IDRC cannot single-handedly correct that imbalance. During its first 10 years the Division supported 168 projects with grants totalling \$25 million. Of these projects, 52 were carried out in Asia, 47 in Latin America, 43 in Africa and the Middle East, and 26 in other areas. Compared to the size of the problems, it may be a tiny effort — but it is a significant contribution.

What the Division has done, and continues to do, is to bear down on those areas where it is felt the application of research funds, and the resultant stimulus to local research capability, can have the maximum impact. The Division’s role is thus often a catalytic one, and it is because of this approach that priorities shift from time to time, in response both to changing circumstances and to the expressed needs of the developing countries.

The overall goal, however, remains the same: to help the developing nations to provide a better standard of health for their people through whatever means are most appropriate.



Program Directions

The interrelationships between health, population and development are exceedingly complex. To help clarify them, and in order to deal with some of the specific technical problems involved, the Division's research support is divided under five main headings: rural health care delivery; tropical disease research; water supply and sanitation; fertility regulation methods; and occupational health.

Rural Health Care Delivery

The 'barefoot doctor' and the 'village health worker' are just two of the many *new categories of health personnel* that have been introduced in developing countries in recent years in efforts to bring primary health care to the rural areas. But few organized attempts have been made to study their effectiveness. By supporting research to evaluate these new types of personnel, the program can help policy-makers assess the role of different types of health workers in improving the delivery of health care to rural people.

If primary health care systems are to function effectively with low-level personnel, the role of *middle management and supervision* is vital. Medical staff at provincial and district levels — nurses, health inspectors, administrators — are the key to the success of the system. Unfortunately they are also often the weakest link in the system in many countries. So the aim is to support research designed to upgrade middle-level personnel to perform with maximum efficiency.

Even with efficient middle-management and effective health delivery personnel, the system will not work without good *logistic support*. Small research studies in this area can help to overcome the logistical bottlenecks that are all too common, and keep the health workers in the field adequately supplied with instruments and drugs to do the job for which they were trained.

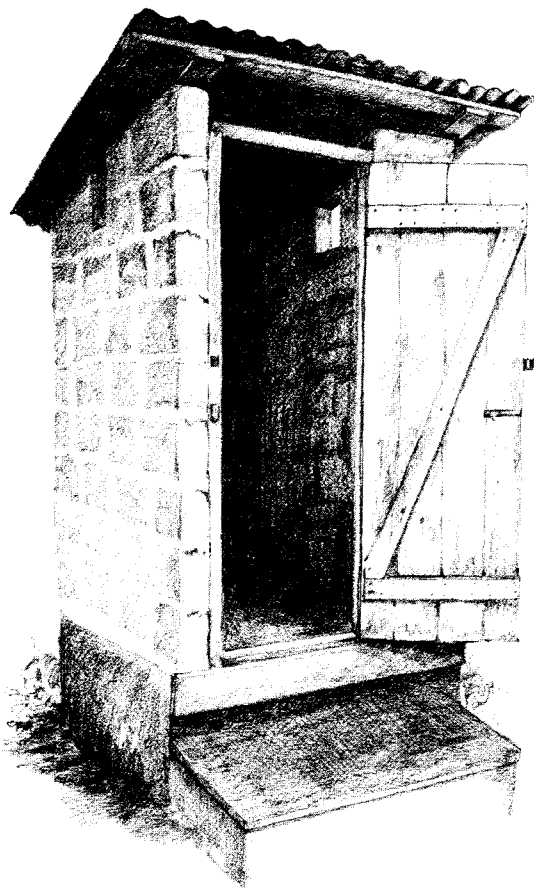
Tropical Disease Research

This rapidly growing program is defined in the broader sense to include the developing countries' prevalent diseases, such as malaria, trypanosomiasis, diarrheal diseases, and intestinal parasites, as well as the often neglected communicable diseases such as measles and tuberculosis that still wreak havoc in many parts of the world.

There is support for studies on *malnutrition-infection interrelationships* and their effect on the immuno-defence mechanisms of the body. An understanding of this complex relationship may well be vital to the success of future large-scale immunization programs to control many of the conditions that are the causes of high mortality and morbidity among children under five.

The *diarrheal diseases* are still the most important cause of death in infants under 12 months. A number of projects are supported in this field, including research on the effects of oral rehydration as a therapeutic measure, and again on the relationship between infection and malnutrition.

Studies are also being carried out in several countries to develop *simple diagnostic techniques* for field use by paramedical personnel. This is extremely relevant in the area of viruses, for example the arboviruses, which are now being found to be the causal agents in some diseases that were previously of unknown origin. *Laboratory and clinical disease research* into the causes and natural history of many of the prevalent diseases in developing countries is also supported by the program. Grants are provided too for *epidemiological field research* to help widen the experience of developing country researchers through studies involving field survey techniques. Such studies also supply valuable baseline data for future planning to control infections. And to assess the impact of known disease control measures, the program supports *implementation/evaluation* studies that will provide feedback for future programs.



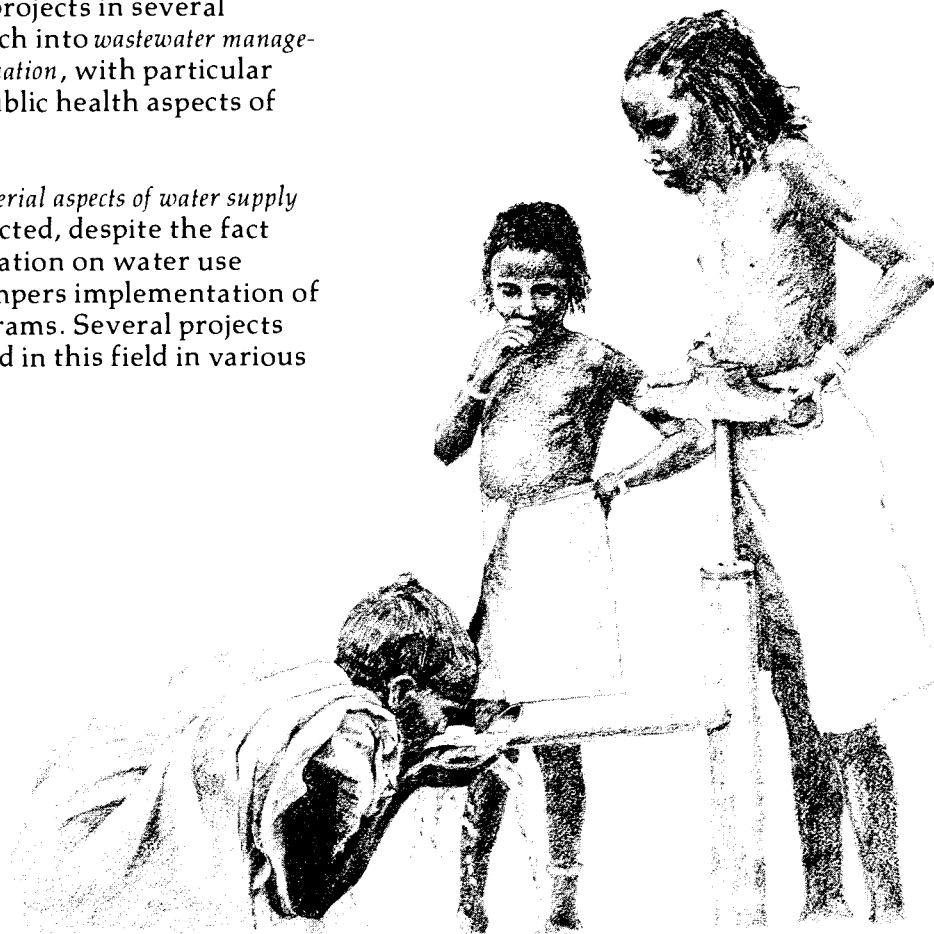
Water Supply and Sanitation

Many tropical diseases are to some extent related to the lack of adequate water supply and sanitation facilities in the developing countries. The impact of *water supply and sanitation on health* is one area of research supported under this program that is directly related to projects dealing with the control of diarrheal diseases. The aim is to devise optimal combinations of water, sanitation and educational inputs for health improvement, particularly for rural areas and urban squatter settlements.

But first there must be water, and the program provides support for several areas of research. Development of low-cost technologies for *surface water treatment and delivery* is important to enable villages and rural towns to acquire safe water from otherwise contaminated sources. The program has also developed a worldwide network to develop and evaluate simple hand-pump technologies for *groundwater extraction*, and research support in this field has been expanded to include studies of groundwater contamination by pathogens

and excessive concentration of chemicals. A related area, with projects in several countries, is research into *wastewater management and wastes reclamation*, with particular emphasis on the public health aspects of such processes.

The *social and managerial aspects of water supply* are too often neglected, despite the fact that lack of information on water use practices often hampers implementation of water supply programs. Several projects are being supported in this field in various parts of the world.



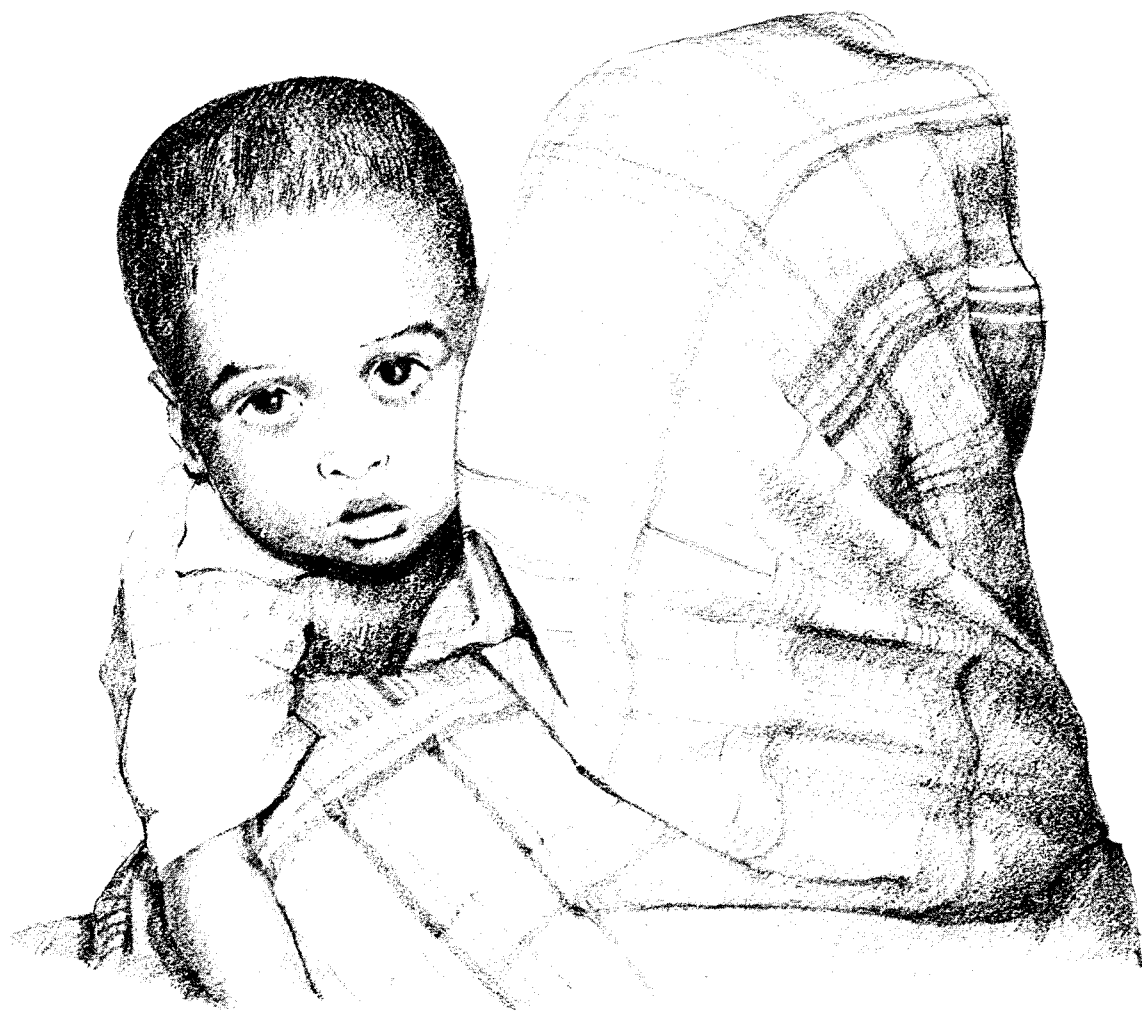
Fertility Regulation Methods

The development of *new and improved contraceptive methods* has been and remains one of the program's main priorities. Many of the new contraceptives such as vaginal rings and implants, are based on hormonal substances used in oral contraceptives. These new long-term methods are now at the stage of field testing, and a number of projects are being funded among different populations and cultures.



The *health aspects of contraception* are also a major concern, and several projects are underway in Southeast Asia and Latin America. Much more research is required on the effects of hormonal contraceptives in particular. The program also provides *research grants and training seminars* for developing country researchers to help them upgrade their skills, especially in health safety research.

Increased activity in the study of the more basic aspects of male physiology, biochemistry and anatomy are required if progress is to be made in developing new *male contraception* methods. The program continues to encourage research by developing country institutions in this area.



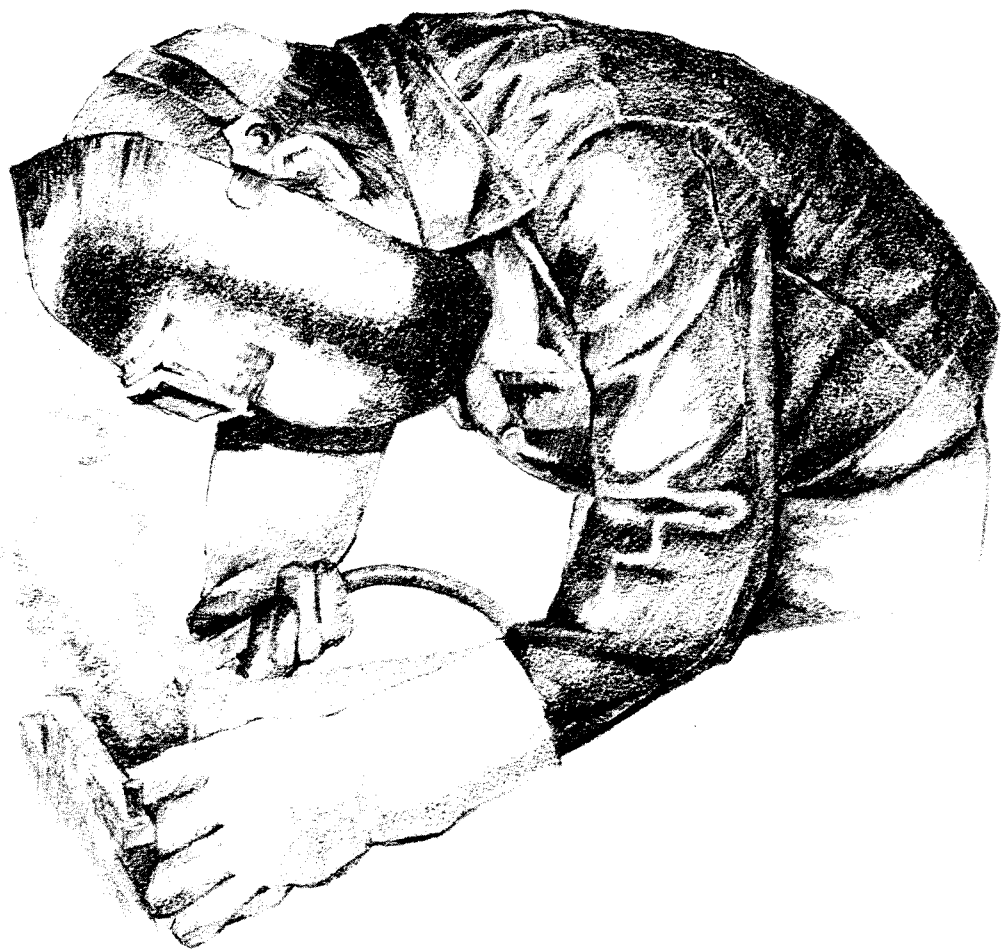
Occupational Health

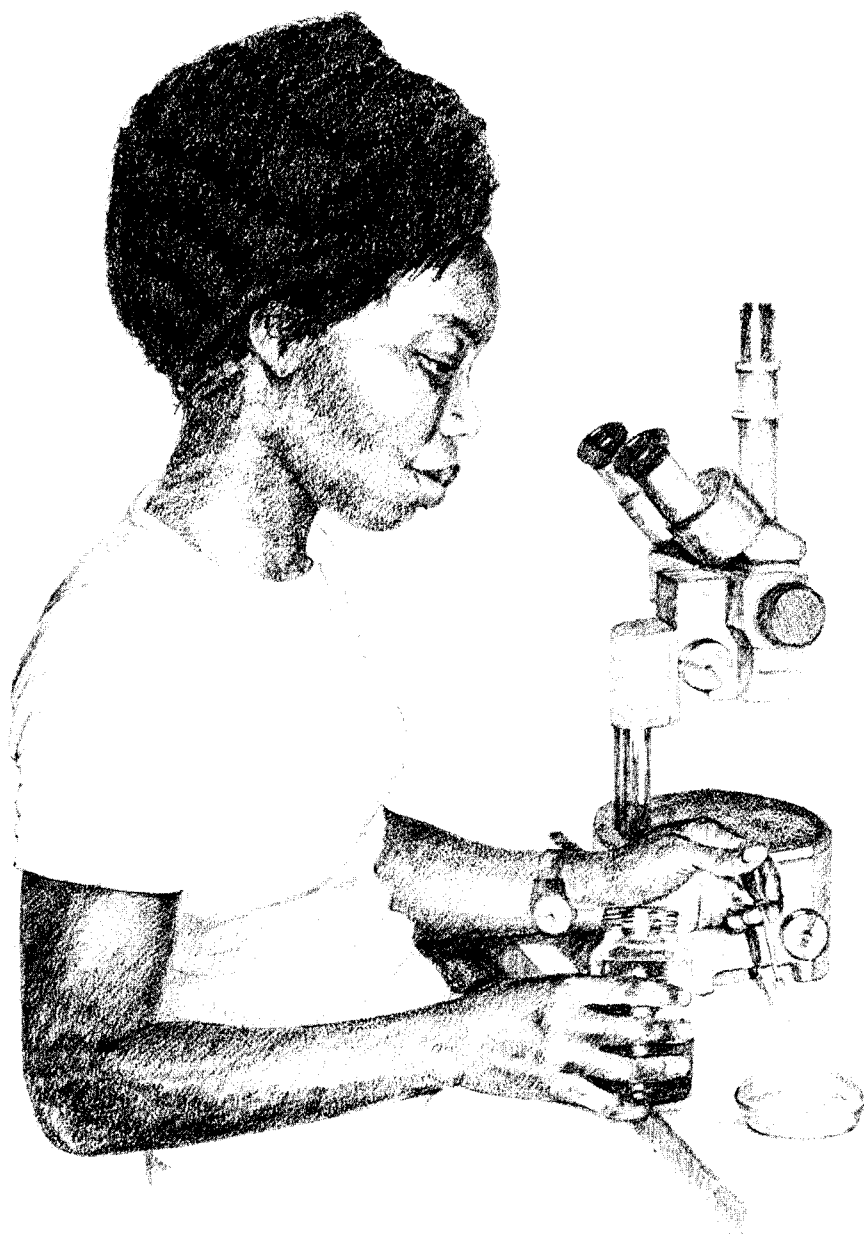
A new area of research support for the Division has arisen from an increasing public concern in recent years with the health and safety hazards encountered in the workplace, particularly in factories, mines and power plants.

The rapid industrialization taking place in an increasing number of developing countries has, however, outpaced such concerns, with the result that the provisions to protect the workers' health, and even basic safety precautions, are often minimal.

In response to approaches from authorities in several developing countries, the Division has provided grants for several projects in this field, and will continue to encourage the development of further research proposals.

Possible areas for future investigation include: chemical toxicity problems; dust diseases related to inadequate ventilation; deafness due to noise; industrial injury prevention; and studies in the agricultural sector on the effects of working with certain types of pesticides.





Project Criteria

In order to obtain funding from IDRC, any proposal for a research project must meet certain criteria. These are kept as flexible as possible in order to permit consideration of a wide range of research proposals, but the following questions give an indication of the Centre's basic funding philosophy.

- Does the proposal fit within a priority expressed by a government or research institution in a developing country?
- Are the research findings likely to have useful application beyond the country in which the project is carried out?
- Will the research help close gaps in living standards and lessen the imbalance in development between rural and urban areas?
- Will the project make the fullest possible use of local resources and research workers from the region?
- Will the project result in better trained and more experienced researchers?

Funding is naturally limited by the Centre's program of work and budget, which are drawn up in consultation with developing country researchers and policymakers, and is subject to approval of the Centre's annual grant by the Parliament of Canada.

Institutions receiving an IDRC grant are themselves expected to make a substantial contribution to the project, proportional to their ability to provide such support. This often takes the form of staff time, and use of facilities and support services.



Before a project is submitted to IDRC's Board of Governors for final approval it goes through several stages of development, involving both IDRC program staff and the institution presenting the proposal.

Preliminary enquiries and proposals often reach IDRC through one of the regional offices, which serve as the Centre's link with the researchers and policymakers of the developing countries, and actively encourage and assist the development of research proposals.

Once the initial request has been evaluated, a formal proposal will be prepared, often in collaboration with IDRC staff. At this stage the Centre may also provide additional assistance if it is needed, such as a pre-project development workshop. Each program division has special budget allocation for such activities.

When the research proposal is in a final form satisfactory to all concerned, a project summary and budget are prepared and placed before IDRC's Projects Committee for discussion. Having received approval in principle from the committee, the project finally goes before the Governors at one of their regular meetings.

This entire process, from initial contact to the receipt of a grant, may take months, even years if a considerable amount of project development activity is required. Much depends on factors such as the state of the initial proposal, its complexity, the need for pre-project activity, and the availability of local resources, facilities, and of course staff. Under normal circumstances, however, a written response to a preliminary proposal or enquiry can be expected within a matter of weeks.

IDRC Offices

Further information about IDRC in general, and the Health Sciences in particular, may be obtained from any of the offices listed below.

Head Office

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Box 8500
Ottawa K1G 3H9
Canada

West Africa

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B.P. 11007, CD Annexe
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Singapore 9124
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