

TT 92/27(b)

ANNEX 7

HEALTH SCIENCES DIVISION

PROJECT ABSTRACTS:

1987 - 1990

**HEALTH SCIENCES DIVISION:
REVIEW AND STRATEGIC OUTLOOK**

August 27, 1991

IDRC - Lib

89828

HEALTH AND THE COMMUNITY PROGRAM



A22417
613.001.5
IDRC
I 5
v. 2
annex 7

3-P-87-0004

PVC Handpumps (China)

Division: HS Programme: Water Supply and Sanitation /
Health and the Community

In China, over 500 million people in rural areas lack or do not have easy access to a reliable supply of safe drinking water. Due to financial constraints, the extension of piped water systems to rural areas is not expected to be feasible in the foreseeable future. One of the simplest and least expensive alternatives for supplying reliable potable water is to install handpumps. Unfortunately, handpumps currently produced in China are poorly designed and made of cast iron. They are expensive, break down easily and cannot be repaired locally. In an attempt to overcome these problems, the Chinese Academy of Agricultural Mechanization Sciences (CAAMS) has expressed interest in examining the IDRC/University of Malaya PVC handpump. However, groundwater depths in excess of 30 metres in many rural areas of the country will require the modification of the IDRC-UM design. This project, therefore, will study the latest developments in plastic technology and adapt and test the IDRC/University of Malaya handpump for deep well use in China. The project will also examine the potential for large-scale manufacture.

/pumps/ /engineering design/ /testing/ /training/ /field
research/

Area under study: /China/

Commitment Date: 1988-04-20 Est. Completion: 1990-04-20

Recipient(s): China. Ministry of Machine-Building Industry,
CN

Researcher(s): Feng Bingyuan

IDRC Contribution: \$ 249880 CAD

Status: Active

3-P-87-0033

Women in Community Development (Asia)

Division: HS Programme: Maternal and Child Health / Health and the Community

In this project a novel research approach called participatory research will be introduced to encourage women in remote and isolated areas in Asia and the Pacific to analyze and address community health needs. The eventual goal is self-reliance and sustainability of health programs developed by women in their own communities. Researchers will involve community women in the identification and examination of health problems, the formulation of possible solutions, and the implementation of selected strategies. Researchers will evaluate the process of participatory research and programming in community health involving these women. Researchers will also undertake a comparative analysis of the program process and outcomes in the different settings in order to extricate factors relevant to the success or failure of this participatory community health program.

/women/ /primary health care/ /women's participation/
/community development/ /participatory research/
Area under study: /Asia and the Pacific/

Commitment Date: 1987-07-24 Est. Completion: 1991-12-31

Recipient(s): Institute of Southeast Asian Studies (ISEAS),
SG

Researcher(s): Osteria, Trinidad S.

Researcher(s): Chen, Paul C.Y.

IDRC Contribution: \$ 317156 CAD

Status: Active

3-P-87-0046

Epidemiology of Diarrheal Disease (Indonesia)

Division: HS Programme: Maternal and Child Health / Health and the Community

Acute diarrheal disease continues to be one of the major causes of infant and child morbidity and mortality in developing countries. In 1980 approximately 5 million children in the Third World died primarily because of dehydration caused by the disease. One of the most effective ways of treating the disease and preventing dehydration is oral rehydration therapy. Other treatments, especially antibiotic therapy, are often used but are only beneficial in a limited number of cases and are costly. In order to alter the present reliance on antibiotics, health workers and community members need to have a clear picture of diarrhea morbidity/mortality and present remedies. This project will be conducted in the rural area of Kecamatan Kuranji in West Sumatra, Indonesia. It will assess present treatment for acute diarrheal disease in the community; identify risk factors in the family and community which may be associated with high rates of the disease; assess the pattern and character of the disease; and determine the etiological agents on a subsample of children with the disease.

/diarrhoeal diseases/ /medical care/ /epidemiology/ /health surveys/

Area under study: /Indonesia/

Commitment Date: 1988-04-11 Est. Completion: 1990-04-11

Recipient(s): University of Andalas. Department of Pediatrics
, ID

Researcher(s): Syamsir Daili

IDRC Contribution: \$ 163700 CAD

Status: Active

3-P-87-0060

FRCS Manual (Philippines)

Division: HS COMM Programme: Water Supply and Sanitation /
Research Results Dissemination and Utilization

Since 1985, researchers in the Province of Capiiz, the Philippines, have been working on an IDRC-funded project (3-P-85-0031) to introduce rainwater catchment systems to people in the province. Although this technology has been available for centuries, such factors as inappropriate tank design and poor construction and maintenance have limited its use. Researchers have now developed an efficient, low-cost method of building and maintaining such tanks. The aim of this project is to design and produce an illustrated manual in the Tagalog and Ilonggo languages on this construction and maintenance technique. It will be used in training sessions conducted by the researchers. The manual will also be used in disseminating the technology to other provinces in the country. As a part of this project, posters and brochures promoting the technology will be designed, printed, and distributed to encourage wider adoption and construction of the rainwater catchment systems.

/water storage/ /construction/ /maintenance and repair/
/manuals/ /training/ /water supply/ /rain/
Area under study: /Philippines/

Commitment Date: 1987-09-17 Est. Completion: 1990-01-17

Recipient(s): Kabilikat ng Pamilyang Pilipino Foundation, PH
Researcher(s): Almario, Emelina S.

IDRC Contribution: \$ 25490 CAD

Status: Closed

3-P-87-0061

Helminthiasis Control (Sri Lanka)

Division: HS Programme: Tropical and Infectious Diseases /
Health and the Community

Intestinal parasites (helminths) affect over a billion people globally. Significant illness is associated with the infections but community-wide control has not been an easy task. Although sanitation, health education and chemotherapy have long been considered strategies towards helminthiasis control, more information is initially required. This project in rural southern Sri Lanka will attempt to generate relevant information on the prevalence and severity of intestinal worm infestations among children in the community. It will also seek information on factors contributing to the transmission of these infections and how possible intervention to reduce the infestation can be practiced. Particular efforts will be directed towards structured health education and the utilization of selected community members for carrying out the various control tasks.

/parasitic diseases/ /disease transmission/ /children/
/disease control/ /health education/ /social participation/
Area under study: /Sri Lanka/

Commitment Date: 1987-08-26 Est. Completion: 1991-10-31

Recipient(s): University of Ruhuna, LK
Researcher(s): Fonseka, Pushpa

IDRC Contribution: \$ 40020 CAD

Status: Active

3-P-87-0073

Diet and Changing Lifestyle (Mauritius)

Division: HS Programme: Maternal and Child Health / Health and the Community

The disease pattern in Mauritius is changing towards that of more developed countries. There is increasing concern among health authorities that lifestyle patterns among youth may have serious public health implications later in life. It is thought that as Mauritians move away from a more traditional way of life, important changes in dietary patterns, health practices and social behaviour may be occurring. This project will characterize the prevailing diet and lifestyle patterns of Mauritian youth. The study will provide health authorities with information on issues related to the diet and lifestyle of youth which have the potential to lead to serious future health problems. This data will be used to plan public health programs and campaigns.

/youth/ /health surveys/ /diet/ /life styles/
Area under study: /Mauritius/

Commitment Date: 1987-12-09 Est. Completion: 1988-12-09

Recipient(s): Mauritius. Ministry of Health, MU
Researcher(s): Mohith

IDRC Contribution: \$ 28965 CAD

Co-funding Agencies:

UNICEF
Funding: \$ 14135 CAD

Status: Active

3-P-87-0081

"Waterlines" - Phase II

Division: HS IS COMM Programme: Water Supply and Sanitation / Socioeconomic Information -- Human Environment, Health and Population Information / Research Results Dissemination and Utilization / Health and the Community

With the commencement of the International Water Supply and Sanitation Decade, the need for a publication on appropriate water supply and sanitation technologies aimed at professional and technical staff in developing countries was identified. Phase I of this project supported the publication of "Waterlines" by Intermediate Technology Publications Limited (ITPL). An independent marketing study carried out toward the end of phase I reaffirmed the usefulness of the journal and the fact that it is still the only forum of its type addressing the needs of developing countries. This second phase will enable ITPL to continue publication of "Waterlines" to the end of the Water Supply and Sanitation Decade and to implement new marketing and publication strategies aimed at improving the long-term viability of this publication. This will be the Centre's final phase of support to "Waterlines".

/periodicals/ /water supply/ /sanitation/ /appropriate technology/

Area under study: /Global/

Commitment Date: 1987-11-05 Est. Completion: 1990-09-01

Recipient(s): Intermediate Technology Publications Limited (ITPL), GB

Researcher(s): Burton, Neal

IDRC Contribution: \$ 95000 CAD

Status: Closed

3-P-87-0084

Water Pumping Technology (Malaysia) - Phase III

Division: HS IS OPE Programme: Water Supply and Sanitation
/ Information Tools and Methods / Health and the Community

IDRC's handpump program has focussed on developing a low-cost water pumping device that can be fabricated and assembled in-country, and installed and maintained by villagers themselves. Phase I consisted of a network of projects which examined the technical viability of a unique handpump design incorporating plastic (PVC) below-ground components. A second network (Phase II) showed that these pumps are easily adapted to varying social and environmental conditions, are affordable, and can be mass-produced in-country. To derive maximum benefits from the results of the research and development activities supported in the first and second phases, this phase III project in Malaysia will establish a regional centre of excellence for handpump technology. The centre will provide training in the manufacture, assembly, installation and maintenance of the UNIMADE handpump to a network of manufacturing units (large- and small-scale) within the region and elsewhere. Also the project will develop a computerized communications network (Telematics Network) to facilitate technical and marketing support to all participating organizations.

/pumps/ /manufacturing/ /technology transfer/ /technical
information/ /information dissemination/ /telecommunications/
Area under study: /Malaysia/

Commitment Date: 1988-03-17 Est. Completion: 1991-05-01

Recipient(s): University of Malaya. Department of Mechanical
Engineering, MY
Researcher(s): Goh Sing Yau

IDRC Contribution: \$ 1129040 CAD

Co-funding Agencies:

Malaysia. Ministry of Health
Funding: \$ 159250 CAD

CIDA
Funding: \$ 127270 CAD

Status: Active

3-P-87-0091 Socioeconomic Study of EWWCA Handpump Project (Ethiopia)

Division: HS Programme: Water Supply and Sanitation /
Health and the Community

Apart from providing unskilled labour, communities are rarely given the opportunity to examine, assess, and choose a water pumping technology introduced by an external agency. Nor were villagers involved in pump maintenance and repair once installed. Recently, much has been said and printed about handpumps that can be easily maintained and repaired by the villagers themselves. The Ethiopian Water Works Construction Authority (EWWCA), under a grant from IDRC (3-P-83-0244), has developed two low-cost, robust handpump models made from locally available materials. These handpumps can be installed, maintained and repaired by trained community-level operators. The purpose of this project is to study the perception of villagers with regard to the EWWCA handpump technology, the nature and degree of their involvement in the planning and implementation of the program, their reaction and capacity to accept the responsibility to maintain the pumps, and the impact of the handpump program on their daily activities.

/pumps/ /water supply/ /project evaluation/ /social surveys/
/maintenance and repair/ /social participation/
Area under study: /Ethiopia/

Commitment Date: 1988-04-22 Est. Completion: 1990-10-22

Recipient(s): Addis Ababa University, ET
Researcher(s): Lakew Woldetekle

IDRC Contribution: \$ 110638 CAD

Status: Active

3-P-87-0092

Women in Handpump Technology (Sri Lanka) - Phase II

Division: HS Programme: Water Supply and Sanitation /
Health and the Community

Phase I of this project investigated strategies for the creation of self-sustaining pump manufacturing units, and the implementation of village-based monitoring and maintenance programs in Sri Lanka (3-P-83-0193). The project focused on the participation of women in all aspects of handpump technology including manufacturing, assembly, installation and maintenance. The aim of this second phase is to replicate and evaluate the dissemination strategies developed in the previous study. Researchers will investigate the role and impact of women handpump technicians as educators and change agents in the community; and further develop and field-test a low-cost well drilling technique originally developed in the Philippines.

/pumps/ /manufacturing/ /maintenance and repair/ /women's
participation/ /drilling/ /wells/ /testing/
Area under study: /Sri Lanka/

Commitment Date: 1988-02-16 Est. Completion: 1991-02-16

Recipient(s): Sarvodaya Economic Enterprises Development
Service (SEEDS), LK
Researcher(s): De Silva, Dulan

IDRC Contribution: \$ 370140 CAD

Co-funding Agencies:

CIDA
Funding: \$ 202170 CAD

UNICEF
Funding: \$ 101710 CAD

Status: Active

3-P-87-0100

Infant and Child Mortality (Nigeria)

Division: HS Programme: Maternal and Child Health / Health and the Community

Infant and child mortality rates have made important declines in Nigeria since the early 1950s. Due to continuing regional divergences surrounding the analysis of census data, little information is available on current levels and trends in mortality and their socioeconomic, cultural and environment determinants. This project will develop and test a simplified methodology that fuses techniques and the accumulated experience of health and social science traditions. The project's focus on environment, maternal behaviour and health service delivery will provide useful information for guiding the design of health and community development intervention programs.

/child mortality/ /infant mortality/ /epidemiology/ /child care/ /maternal and child health/ /health services/
Area under study: /Nigeria/

Commitment Date: 1988-02-08 Est. Completion: 1989-02-08

Recipient(s): University of Ibadan. Department of Geography,
NG

Researcher(s): Iyun, B.F.

IDRC Contribution: \$ 36240 CAD

Status: Active

3-P-87-0103

Excreta Disposal (Bolivia)

Division: HS Programme: Water Supply and Sanitation /
Health and the Community

The lack of adequate measures for the disposal of human excreta and wastewater constitutes a major environmental problem in much of the Altiplano region of Bolivia. Although the government has implemented a national sanitation program, its success is limited due to the inappropriate costs and design of the latrine technology being promoted. In response to this condition, the Proyecto Sucre - Ciudad Universitaria (PSCU), has been investigating alternative sanitation technologies. To date, 120 units of a prototype tile and mortar ventilated pour-flush latrine have been constructed around the town of Sucre. This project will improve the sanitary conditions in the low-income areas of Sucre through the introduction of 40 modified PSCU latrine units. Researchers will identify the factors which have limited the acceptance, correct use and maintenance of existing latrines; evaluate the technical performance and social acceptability of four innovative latrine designs; assess costs; and develop a simple booklet on the construction, operation and maintenance of the latrines.

/toilets/ /appropriate technology/ /engineering design/
/evaluation/ /health education/ /cost analysis/
Area under study: /Bolivia/

Commitment Date: 1987-12-22 Est. Completion: 1989-12-22

Recipient(s): Proyecto Sucre Ciudad Universitaria (PSCU), BO
Researcher(s): Morales, Tirson Mina

IDRC Contribution: \$ 83700 CAD

Status: Active

3-P-87-0111

Liver Fluke Infections (Thailand) - Phase II

Division: HS Programme: Tropical and Infectious Diseases /
Health and the Community

This project is the continuation of Liver Fluke Infection (Thailand) 3-P-83-0307, which aimed to control *Opisthorchis viverrini* infection in four villages in Khon Kaen province, Thailand. The prevalence rate of infection was more than fifty percent in all four study villages. It was shown that infection was caused by the eating of raw or half-cooked fish and spread by unsanitary defecation habits. Mass treatment of the population with praziquantel was followed by a nutrition/health education program. If this program is effective the prevalence rate should remain low, but there was insufficient time in phase I to measure this. This three-year phase II has as its primary objective the evaluation of the effectiveness of the nutrition/health education program on maintaining the low prevalence of liver fluke infection and measuring the possible changes in the nutritional and health status of the population. If the results are significant, the strategy could be applied elsewhere in the region.

/parasitic diseases/ /disease control/ /health education/
/programme evaluation/
Area under study: /Thailand/

Commitment Date: 1988-07-15 Est. Completion: 1991-07-15

Recipient(s): Mahidol University. Department of Tropical
Nutrition, TH
Researcher(s): Panata Migasena

IDRC Contribution: \$ 176400 CAD

Status: Active

3-P-87-0153

Community Self-Reliance (Thailand)

Division: HS Programme: Water Supply and Sanitation /
Health and the Community

The term "community participation" is currently at the forefront of development jargon and is a key component of many community development projects. While there appears to be a consensus regarding its definition and the rationale for involving potential beneficiaries in the planning and implementation of such projects, there is scant information on the process involved in actually achieving community participation. This project will provide a better understanding of the processes involved in mobilizing communities to plan, organize, implement, and manage basic community services. The project will use the introduction of water supply and sanitation facilities in three Thai rural communities of different socioeconomic and organizational levels as the vehicle to investigate these processes. Project participants will mobilize and involve community leaders and villagers in the planning process; train villagers to construct and maintain demonstration models of appropriate water and sanitation facilities in each study community; and evaluate the strengths and weaknesses of this community mobilization strategy.

/community development/ /self-help/ /water supply/
/sanitation/ /project design/
Area under study: /Thailand/

Commitment Date: 1987-11-09 Est. Completion: 1990-02-09

Recipient(s): Chulalongkorn University, TH
Researcher(s): Thamrong Prempridi

IDRC Contribution: \$ 52480 CAD

Status: Closed

3-P-87-0158

Open Mole (Liberia)

Division: HS Programme: Maternal and Child Health

Open mole is a condition perceived by Liberians as a "hole" in the frontal part of the child's skull. The usual course of treatment of this condition is traditional medicines, which in many cases results in the child's death. From the medical point of view, open mole represents the sunken fontanelle which is caused by dehydration as a result of severe diarrhea and/or vomiting. This project will gather information on the knowledge, attitudes and practices of parents with children who have open mole. This information will be used to design educational packages to be used in the national primary health care programs aimed at educating parents on dealing with this condition more effectively. The research will be conducted in two countries representing three ethnic groups. A total of 500 parents, 42 traditional healers, and 7 health workers will be interviewed using prepared questionnaires.

/children/ /deficiency diseases/ /maternal and child health/
/traditional medicine/ /attitudes/
Area under study: /Liberia/

Commitment Date: 1987-12-28 Est. Completion: 1989-04-28

Recipient(s): Cuttington University College, LR
Researcher(s): Kezala, Wilston S.W.

IDRC Contribution: \$ 38860 CAD

Status: Closed

3-P-87-0192

Growth Faltering (Malawi)

Division: HS Programme: Maternal and Child Health / Health and the Community

Malnutrition is a major public health problem of infants and young children in Malawi. Although much is already known about individual factors related to malnutrition in the country, there is a great need to examine the many risk factors associated with malnutrition. This will allow researchers to more accurately characterize when and why children's growth falters. The study will analyze the pre and postnatal growth and development of 935 infants into their second year of life (as well as the development of their siblings under the age of five) in relation to the characteristics of their communities, households and care-givers. The study focuses in particular on pre and postnatal growth in relation to access to and use of programs and services in health and agriculture. It also includes measurement of related factors such as household food availability, morbidity of mothers and children and women's time allocation.

/malnutrition/ /children/ /child development/ /social surveys/

Area under study: /Malawi/

Commitment Date: 1988-06-01 Est. Completion: 1990-12-01

Recipient(s): University of Malawi, MW
Researcher(s): Msukwa, Louis

IDRC Contribution: \$ 231660 CAD

Status: Active

3-P-87-0212

Socioeconomic Determinants of Infant Mortality in Rosario
(Argentina) - Phase II

Division: HS SS Programme: Health and the Community /
Population and Development Research

This project will permit the completion of a three-year research effort on infant health and mortality conducted by a multidisciplinary research team in Rosario, Argentina. It will also allow the elaboration of a strategy to improve health service delivery. Researchers will evaluate the impact of behavioural, socioeconomic, biological, and institutional factors on perinatal and infant morbidity by using the data generated in phase I. Specifically, the project will analyze the impact of socioeconomic position, family living conditions and some relevant genetic information of the mother before, during and after pregnancy; examine the impact of these factors and the mother's behaviour on the biological conditions of the child just after birth and during the first year of life; and analyze the influence of the biological medical practices pregnancy, child delivery, and the newborn, and the medical practices the institution assisting the delivery.

/infant mortality/ /epidemiology/ /maternal and child health/
/health conditions/ /infants/ /morbidity/ /health services/
/data analysis/
Area under study: /Argentina/

Commitment Date: 1988-02-29 Est. Completion: 1989-02-29

Recipient(s): Asociacion Medica de Rosario, AR
Researcher(s): Bloch, Carlos

IDRC Contribution: \$ 37000 CAD

Status: Active

3-P-87-0232

Psycho-Social Support and Pregnancy Outcomes (Latin America)

Division: HS Programme: Maternal and Child Health / Health and the Community

In Latin America antenatal care has tended to be very biomedical, curative and institutionally based, rather than preventive and addressing individual needs, particularly social and psychological needs. Nor has the impact of psycho-social interventions (biological, emotional support) on perinatal outcomes been widely studied anywhere. In this project a network of Latin American biomedical and social scientists in Argentina, Brazil, Mexico and Cuba will study the impact of psychosocial interventions on pregnancy outcomes. The focus will be on home visiting for education, mobilizing family and community support, and promoting the proper use of health and social services.

/maternal and child health/ /pregnancy/ /health services/
 /psychological aspects/
 Area under study: /Latin America/ /Argentina/ /Brazil/
 /Mexico/ /Cuba/

Commitment Date: 1988-09-05 Est. Completion: 1990-09-05

Recipient(s): International Development Research Centre
 (IDRC), CA

Recipient(s): Centro Rosarino de Estudios Perinatales, AR

Recipient(s): Universidade Federal de Pelotas. Dept. of
 Pediatrics, BR

Recipient(s): Cuba. Ministerio de Salud Publica, CU

Recipient(s): Instituto Nacional de Salud Publica, MX

Recipient(s): Universidade Federal de Pelotas. Biostatistical
 Unit, BR

Researcher(s): Belizan, José

Researcher(s): Barros, Fernando

IDRC Contribution: \$ 953133 CAD

Status: Active

3-P-87-0243

Endemic Goitre (Ecuador)

Division: HS Programme: Maternal and Child Health / Health and the Community

Iodine deficiency disorders (IDD) are one of the most important public health problems in developing countries. Today 800 million people around the world live in areas deficient in dietary iodine. However, endemic goitre, an IDD has also been found in areas where adequate intakes of dietary iodine are consumed: Coastal Ecuador may be one of these areas. This project aims to determine the prevalence and etiology of goitre on the coast of Ecuador. In particular, the focus will be upon establishing the relationship between the consumption of cassava, a goitrogenous food, and thyroid function. The results may have important public health implications for other areas with endemic goitre where cassava is a staple of the diet and dietary iodine intakes are adequate. Also, it is expected the findings will be used by the government authorities to help plan a strategy to eradicate the condition.

/deficiency diseases/ /endocrine system/ /hormones/
/epidemiology/ /food consumption/ /cassava/
Area under study: /Ecuador/

Commitment Date: 1988-08-10 Est. Completion: 1990-08-10

Recipient(s): Fundacion Ciencia para el Estudio del Hombre y
la Naturaleza (FUNDACION CIENCIA), EC
Researcher(s): Teran, José Varea

IDRC Contribution: \$ 147990 CAD

Status: Active

3-P-87-0244

Maternal and Perinatal Mortality (Indonesia)

Division: HS Programme: Maternal and Child Health -- Health and the Community

One of the main goals of the Indonesian government is to reduce maternal and perinatal death and disease. In order to develop appropriate remedial programs, a preliminary study in rural central Java will be conducted to provide more precise mortality and morbidity data, together with associated etiology, risk factors and use of available health services. A retrospective study of 20,000 pregnancies, which are expected to include approximately 100 maternal and 1,000 perinatal deaths, will be performed through a survey of 58,000 households representing a population of 580,000. Each maternal death will be reviewed by a panel of physicians to determine its etiology and preventable factors. Findings and recommendations will be presented to the Ministry of Health following a provincial workshop.

/maternal and child health/ /mortality/ /epidemiology/
/social surveys/
Area under study: /Indonesia/

Commitment Date: 1988-08-02 Est. Completion: 1990-02-02

Recipient(s): Coordinating Board of Indonesian Fertility
Research, ID
Researcher(s): Agoestina, Tina
Researcher(s): Soejoenoes, Ariawan

IDRC Contribution: \$ 145320 CAD

Co-funding Agencies:

WHO

Funding: \$ 40395 CAD

Status: Closed

3-P-87-0252

Diabetes and Hypertension in Women (Trinidad)

Division: HS SS Programme: Maternal and Child Health --
Health and the Community / Women in Development

Diabetes mellitus and hypertension are two of the major causes of death or disability in Trinidad and Tobago and indeed in the Caribbean region for both men and women. This project will conduct a survey of a representative sample of women in whom the conditions of diabetes mellitus and hypertension have been diagnosed. Researchers will collect information about women's perception of the disease, the prescribed treatment, compliance, and other aspects of disease management and control. Also researchers will gather information on the social and behavioural variables involved in the development of the diseases. The findings of the research will be made available to health policymakers and health education specialists.

/diabetes/ /cardiovascular diseases/ /blood/ /women/ /social
surveys/ /attitudes/ /medical care/ /social aspects/
Area under study: /Trinidad and Tobago/

Commitment Date: 1988-07-01 Est. Completion: 1989-07-01

Recipient(s): Researchers for Education, Action and
Development (READ), TT
Researcher(s): Wiltshire, Faith

IDRC Contribution: \$ 84760 CAD

Status: Active

3-P-87-0272

Rehabilitation (Queen's Jamaica)

Division: HS Programme: Occupational Health and
Environmental Toxicology / Health and the Community

In Jamaica, the lack of accurate data about the prevalence of physical disability makes accurate planning and provision of social and health care systems impossible. This project will design and conduct a survey to determine how prevalent physical disability is and to what extent society and the disabled population realize the nature of physical disability. The survey will also sample "attitudes" towards the disabled. Data will be used to plan social and health programs for the disabled and to design curricula for health science personnel who provide services for the disabled. Recommendations concerning the re-integration and employment of the disabled will be made. The research model developed in Jamaica will provide the base from which similar surveys could be undertaken in other countries in the region.

/physically disabled/ /disability/ /social surveys/
/attitudes/ /disabled care/ /programme planning/
Area under study: /Jamaica/

Commitment Date: 1988-03-31 Est. Completion: 1991-06-30

Recipient(s): Disabled Peoples' International (DPI), CA
Researcher(s): Palmer, Derrick L.

IDRC Contribution: \$ 83450 CAD

Co-funding Agencies:

Combined Disability Association

Status: Active

3-P-87-0274

Perinatal Mortality (Jamaica) - Phase II

Division: HS Programme: Maternal and Child Health / Health and the Community

Phase I of this project addressed one of the major health problems in Jamaica: disease and death during the perinatal period (first week after birth). The project studied all births in Jamaica during a two-month period, as well as all neonatal hospital admissions for a six-month period and all stillbirths and neonatal deaths over one year. It generated data on perinatal death and disease, data in which the Jamaican Ministry of Health has shown a high level of interest. In Phase II, researchers plan to perform a more detailed, comprehensive analysis of the data obtained. Examples of anticipated specific areas in which recommendations will be generated include the identification and management of high risk cases of hypertension in pregnancy; postpartum haemorrhage; and the prevention of intrapartum asphyxia.

/infant mortality/ /maternal and child health/ /health services/

Area under study: /Jamaica/

Commitment Date: 1988-04-18 Est. Completion: 1990-05-01

Recipient(s): University of the West Indies, JM

Researcher(s): Ashley, Deanna

IDRC Contribution: \$ 276029 CAD

Status: Active

3-P-87-0286

DAFF Latrine (Guatemala) - Phase II

Division: HS Programme: Water Supply and Sanitation /
Health and the Community

Between 1978 and 1983, an IDRC-supported project "Excreta Disposal (3-P-78-0015)", investigated the technical performance and social acceptability of four latrine designs in Guatemala. Based on the findings of this study rural latrine building projects were begun to promote the design of the Vietnamese, double vault, pit latrine, later known as the Dry Alkaline Fertilizer Family Latrine (DAFF). A national survey conducted to evaluate the acceptance and use of the DAFF latrine in Guatemala (see 3-P-86-0009) indicated a high degree of diffusion in selected regions of the country. The survey also indicated that where monitoring and follow-up activities were lacking, the latrines were not accepted. The present project will provide technical support to institutions disseminating DAFF latrines in Guatemala, with specific emphasis in promoting social acceptance, sanitary control, agronomical experimentation and coordination with other interested NGOs.

/toilets/ /evaluation/ /surveys/ /technical cooperation/
/waste utilization/
Area under study: /Guatemala/

Commitment Date: 1988-04-29 Est. Completion: 1991-04-29

Recipient(s): Centro de Estudios Mesoamericano Sobre
Tecnologia Apropriada (CEMAT), GT
Researcher(s): Caceres, Armando

IDRC Contribution: \$ 215300 CAD

Co-funding Agencies:

International Reference Centre for Waste Disposal (IRCWD)

Status: Active

3-P-87-0293

Vitamin A Deficiency (Tanzania)

Division: HS Programme: Maternal and Child Health / Health and the Community

Despite the growing attention given to vitamin A deficiency and the eye disease, xerophthalmia, which results from it, it is still neglected medical problem in developing countries. It is estimated that every year in Tanzania, two to four thousand children lose their sight due to vitamin A deficiency. This project will assess the magnitude and severity of the vitamin A deficiency problem among children in the rural Shinyanga region. The major causes of vitamin A deficiency will be identified and the influence of feeding practices and infections on vitamin A status learned. Information generated from the study will be made available to health authorities for the design of intervention programs.

/vitamin deficiency/ /eye diseases/ /children/ /social surveys/

Area under study: /Tanzania/

Commitment Date: 1988-05-12 Est. Completion: 1989-05-12

Recipient(s): Tanzania Food and Nutrition Centre (TFNC), TZ
Researcher(s): Temalilwa, C.R.

IDRC Contribution: \$ 57490 CAD

Status: Closed

3-P-87-0306

Mother's Education and Child Health (S. Korea)

Division: HS SS Programme: Maternal and Child Health /
Population and Development Research / Health and the
Community

Social progress has lagged far behind recent economic growth in South Korea. However, as democracy makes gains across the nation, increasing attention has been paid to social and welfare problems. Among the major social problems being addressed are poverty, women's status, child health and access to health care. This project assumes that women's education is likely to be the only factor influencing the mother's health behaviour toward her child and will investigate the relationship between the mother's education and the child's health. Researchers will collect and analyze data to show the relationship between women's education and child nutrition, health care and health status. The study will also examine possible behavioural determinants influencing this relationship.

/mother/ /behaviour/ /education of women/ /levels of
education/ /child rearing/ /health conditions/
Area under study: /Korea R/

Commitment Date: 1988-05-17 Est. Completion: 1989-11-17

Recipient(s): Population Association of Korea, KR
Researcher(s): Kong-Kyun Ro

IDRC Contribution: \$ 80664 CAD

Status: Active

3-P-87-0323

Diarrheal Disease (Uruguay)

Division: HS Programme: Maternal and Child Health / Health and the Community

Acute Diarrheal Diseases (ADD) are the single most important cause of death in children between one and twelve months of age in Uruguay. Despite their epidemiological importance, their etiology has been studied only in hospitalized or outpatient populations. Although Oral Rehydration Therapy (ORT) was introduced in the country in the early 1980's ineffective training of health personnel and education of the public have compromised its application and, hence, its impact. This project will characterize ADD in children under 18 months in a low socioeconomic community setting, and, during acute episodes, assess their management by both parents and health workers. From the information collected, researchers will propose actions aimed at improving the management of the disease.

/diarrhoeal diseases/ /children/ /epidemiology/ /medical care/ /disease control/
Area under study: /Uruguay/

Commitment Date: 1988-10-10 Est. Completion: 1990-10-10

Recipient(s): Universidad de la Republica, UY
Researcher(s): de Peluffo, Maria H. Hortal

IDRC Contribution: \$ 52380 CAD

Co-funding Agencies:

Uruguay. Ministerio de Salud Publica

Status: Active

3-P-88-0001

Women, Water and Sanitation: An Action-Research Project - Phase II

Division: HS Programme: Health and the Community / Water Supply and Sanitation

Research in phase I of this project confirmed that the poor environmental conditions and personal hygiene habits of the inhabitants of two Nile Delta villages are largely related to the inappropriateness of the existing water supply and sanitation technologies. This second phase will monitor and evaluate the impact of innovative, community-chosen water supply and sanitation technologies, community-level management of these facilities, and a hygiene education program designed to promote an awareness of environmental conditions and improve general hygiene practices. Phase I provided information concerning the planning installation and maintenance of water supply and sanitation facilities; the existing knowledge, attitudes and practices of water collection and storage, sanitation and hygiene; and the role of villagers, particularly women, in decisions concerning water supply and sanitation.

/water supply/ /sanitation/ /health education/ /women's role/
/women's participation/ /community development/
Area under study: /Egypt/

Commitment Date: 1988-08-31 Est. Completion: 1990-04-31

Recipient(s): American University in Cairo, EG
Researcher(s): El-Katsha, Samiha F.

IDRC Contribution: \$ 136180 CAD

Status: Active

3-P-88-0037

Traditional Fertility Regulation (Nigeria)

Division: HS Programme: Health and the Community / Maternal and Child Health

Although modern family-planning programs have assumed an increasingly important role in the economic and social development and health programs of nations throughout the world, they have yet to be adopted by a significant proportion of the inhabitants. This project will explore the possibility of using traditional medical practitioners to promote effective family-planning programs among the rural Yoruba of southern Nigeria. Researchers will identify the level of practice of both traditional and modern contraception among the population; estimate through case studies the effectiveness of the traditional contraceptive methods; identify the knowledge of and the attitude of traditional medical practitioners to modern contraceptive methods; and based on research results, formulate ways of using traditional medical practitioners in the implementation of effective family-planning programs.

/contraception/ /traditional culture/ /traditional medicine/
/ethnic groups/ /family planning programmes/
Area under study: /Nigeria/

Commitment Date: 1989-01-16 Est. Completion: 1991-01-16

Recipient(s): Obafemi Awolowo University, NG
Researcher(s): Olusi, S.

IDRC Contribution: \$ 60768 CAD

Status: Active

3-P-88-0051

Health Impact of Social Development Programs (Costa Rica) - Phase II

Division: HS Programme: Health and the Community / Maternal and Child Health

Evaluation of primary health care (PHC) and nutrition initiatives is an important aspect of most health programs. Costa Rica is recognized internationally as having put much emphasis on grass roots health and social development programs. This phase II project will continue the in-depth evaluation begun in phase I, which focussed on the impact various PHC and social programs have on a community health status. In phase I, comparisons were made between the health and social statistics of various communities and the types and duration of PHC and social interventions. Phase II will focus on an in-depth socio-anthropological evaluation of community response to the various intervention programs. Specifically, it will determine the internal and external community factors that influence the impact of PHC and nutrition supplement programs in rural areas of the country.

/primary health care/ /human nutrition/ /food enrichment/
/evaluation/ /rural areas/
Area under study: /Costa Rica/

Commitment Date: 1988-08-05 Est. Completion: 1990-02-05

Recipient(s): Instituto Costarricense de Investigación y
Enseñanza en Nutrición y Salud (INCIENSA), CR
Researcher(s): Castro, Miguel Flores

IDRC Contribution: \$ 163580 CAD

Status: Active

3-P-88-0052

Community Participation in MCH/FP PHC (Sri Lanka) - Phase II

Division: HS Programme: Health and the Community / Maternal and Child Health

Community participation is considered to be one of the cornerstones of most primary health care (PHC) programs in the developing world. However, although PHC programs with active community participation are common throughout the developing world, evaluations of community participation are not. This Phase II project has as its long-term objective the enhancement of the efficacy of rural health care services in Sri Lanka, using the approach of active community participation. Study and experimental areas were chosen in Phase I; village health volunteers and community health committees were encouraged in the study areas and on-going health and community indicators were evaluated in both areas. Phase II, in addition to carrying out further community status studies, will evaluate the effectiveness of this community based approach. The study will be carried out in Mawanella, a rural area about 30 miles south of Kandy.

/primary health care/ /social participation/ /community development/ /evaluation/
Area under study: /Sri Lanka/

Commitment Date: 1988-11-28 Est. Completion: 1990-11-28

Recipient(s): University of Peradeniya. Department of Pediatrics, LK
Researcher(s): Aponso, H.A.

IDRC Contribution: \$ 69510 CAD

Status: Active

3-P-88-0104

Integral System for Recycling Organic Waste (Mexico)

Division: HS Programme: Health and the Community / Health and the Environment

The collection, treatment and disposal of human and domestic waste are major challenges facing most urban centres in developing countries. Congested and unplanned housing, high population growth rates, the high volume of organic and inorganic wastes generated, and the inappropriate design and high capital costs of construction of conventional sewerage and waste treatment technologies, combine to thwart efforts to address this problem. The Grupo de Tecnologia Alternativa, S.C. (Group for Alternative Technology), a Mexican NGO, has developed a low-cost, effective means for collecting and treating waste products, called the Sistema Integral de Reciclamiento de Desechos Organicos (SIRDO) (Integrated System for Recycling Organic Wastes). This project will identify the factors which facilitate and/or impede the adoption, operation and maintenance of this technology. The project will also assess the technical and economic performance of the SIRDO system and its related productive activities and identify and analyze the impact of the SIRDO-based process on the socioeconomic and political development of the community.

/sanitation services/ /domestic wastes/ /waste treatment/
/waste recycling/ /technical aspects/ /maintenance and
repair/ /community development/
Area under study: /Mexico/

Commitment Date: 1988-12-01 Est. Completion: 1991-05-31

Recipient(s): Grupo de Tecnologia Alternativa, MX

IDRC Contribution: \$ 239500 CAD

Co-funding Agencies:

IRCWD

Status: Active

3-P-88-0139

Problem-oriented Nutrition Research (Africa)

Division: HS Programme: Health and the Community / Maternal and Child Health

The food and nutrition component of primary health care (PHC) remains very weak in most African countries and malnutrition is widespread in spite of efforts made by government, and non-governmental bodies. Also the contribution of research to overcome malnutrition has been disappointing for reasons that include the lack of relevance of research to community nutrition problems, lack of trained personnel, and failure to disseminate research results. There is a need to encourage applied nutrition research which focuses on the local-level problems, and to improve the methods used to conduct nutrition research and disseminate and apply the results. This project aims to tackle this situation in West Africa by embarking upon a two-pronged approach which includes: the support of workshops to develop research skills and strengthen nutrition knowledge; and the promotion of the development of at least six problem-oriented applied nutrition research proposals.

/human nutrition/ /nutrition research/ /institution building/
/research projects/ /information exchange/ /research
capacity/

Area under study: /West Africa/

Commitment Date: 1989-03-22 Est. Completion: 1990-09-22

Recipient(s): World Health Organization (WHO), CH
Researcher(s): Bailey, Ken V.

IDRC Contribution: \$ 242880 CAD

Status: Active

3-P-88-0164

Evaluation of Nutrition Education Project (Jamaica) - Phase II

Division: HS Programme: Health and the Community / Maternal and Child Health

In the Caribbean countries, studies have shown that 2-19% of preschool children are moderately or severely malnourished. Malnutrition is associated with poverty, the changing lifestyles that accompany development, and deficient breastfeeding and weaning practices. In Grenada and Saint Christopher and Nevis, a multi-media nutrition education package to promote improved weaning practices was developed with IDRC support (Nutrition Education/Weanlings (CFNI) - 3-P-83-0103). The objective of this phase of the project is to conduct an interim evaluation focusing upon the implementation of the distribution plan for the educational materials, the application of the monitoring tool, and the process by which the materials are being used.

/breast feeding/ /child rearing/ /human nutrition/ /health education/ /teaching aids/ /project evaluation/ /weaning foods/

Area under study: /Caribbean/ /Grenada/ /Saint Christopher and Nevis/

Commitment Date: 1989-03-24 Est. Completion: 1989-09-02

Recipient(s): Caribbean Food and Nutrition Institute (CFNI), JM

Researcher(s): Patterson, A.W.

IDRC Contribution: \$ 30012 CAD

Status: Active

3-P-88-0165

Impact of Family Planning on Fertility (Kenya)

Division: HS SS Programme: Health and the Community /
Population, Education and Society / Maternal and Child Health

With an estimated 4.0% rate of natural increase, Kenya has the fastest growing population in the world. To counteract the undesirable impact of this population boom on economic development, the government has pursued an active family planning policy since 1967. The establishment of family planning services, now provided freely to citizens through government health facilities, is viewed as the means to attain a reduction in fertility and a general curtailment of population growth. However, the desired impact of fertility reduction in the country has not been achieved despite the vigorous expansion and flourishing of programs in both the public and private sectors. Little research has been undertaken to explore the factors that motivate a woman to accept, continue practicing, change from one method to another, or stop practicing family planning. This project will attempt to probe the factors which affect reproductive behaviour in the Chogoria area of the eastern province and generate information about what is necessary for the acceptance and continued use of family planning.

/family planning/ /fertility determinants/ /social surveys/
Area under study: /Kenya/

Commitment Date: 1990-05-18 Est. Completion: 1991-07-31

Recipient(s): Kenyatta University. Department of Geography,
KE

Researcher(s): Bauni, E.K.

IDRC Contribution: \$ 30600 CAD

Status: Active

3-P-88-0172

Self-Medication Among the Urban Poor (Peru)

Division: HS SS Programme: Health and the Community /
Population, Education and Society / Maternal and Child Health

Previous research indicates that poor families in shantytowns of Lima act as therapeutic units, diagnosing and medicating themselves. When outside help is sought, it is often from a pharmacist or a drugstore employee. This project will examine the role of pharmacists as health agents and the importance of pharmacy consultations in the health strategy of the urban poor. Also researchers will examine the implications of these consultations and prepare public health policy recommendations. The specific objectives are to reconstruct the typical process of consultation on the basis of the disease involved and the economic, cultural, and demographic characteristics of the patients and their families; and identify the factors which play a part in the consultation and the role which pharmacists play as health agents at both the cultural and clinical-medical levels. Results will be broadly disseminated through the extensive network of schools of social work in the region.

/health services/ /medical care/ /slums/ /pharmacists/
/health policy/
Area under study: /Peru/

Commitment Date: 1989-01-13 Est. Completion: 1991-02-13

Recipient(s): Centro Latinoamericano de Trabajo Social
(CELATS), PE
Researcher(s): Maguina, Alejandrino

IDRC Contribution: \$ 56500 CAD

Status: Active

3-P-88-0180

PHC Workshop (Costa Rica)

Division: HS Programme: Health and the Community / Maternal and Child Health

The primary health care (PHC) strategy gains wider acceptance every day as the means of access to the health care system for the population, particularly for marginal groups. But the operational research to identify, analyze, and solve the main problems the countries are facing has not been properly developed. This project will bring together eight Central American countries to analyze the situation of PHC and to develop appropriate goals for future programs in each country and in the region. Researchers will analyze general health conditions, emphasizing those areas susceptible to improvements in PHC strategies; examine the actual situation of PHC programs, their main achievements and difficulties; and assess the development of health and operational research in these programs. Researchers will identify research needs to improve the efficacy, efficiency, and impact of PHC programs.

/primary health care/ /health planning/ /programme evaluation/ /operations research/ /research needs/
Area under study: /Central America/

Commitment Date: 1989-01-12 Est. Completion: 1990-01-12

Recipient(s): Centro Internacional de Investigacion y
Asesoria en Salud (CIIAS), CR
Researcher(s): Lopez Nunez, Maria Elena

IDRC Contribution: \$ 82420 CAD

Status: Active

3-P-88-0181

Evaluation of Rural Water Supply Projects (Sierra Leone)

Division: HS Programme: Health and the Community / Water Supply and Sanitation

Sierra Leone faces severe problems of safe and adequate water supplies, especially in the dry season. The rural poor (who form 80% of the country's population of 3.7 million) are most severely constrained in terms of the availability, quantity, and quality of water. The last two decades have seen a host of foreign aided schemes implemented to improve rural water supplies. However, the results have been disappointing. This study examines one central question: what has gone wrong with the schemes such that they have not had the intended impact. The focus of the present study is the Northern Province, where the water supply situation is most critical. Two chiefdoms with different water supply schemes will be examined. Researchers will investigate quality and quantity of water use; and level of community involvement and local resource base utilization.

/water supply/ /rural areas/ /project evaluation/ /water quality/ /community development/ /social participation/
Area under study: /Sierra Leone/

Commitment Date: 1989-02-16 Est. Completion: 1991-08-16

Recipient(s): Njala University College. Dept. of
Environmental Studies and Geography, SL
Researcher(s): Bah, Osman M.

IDRC Contribution: \$ 149260 CAD

Status: Active

3-P-88-0211

Iron Supplementation Delivery Schemes (Thailand)

Division: HS Programme: Health and the Community / Maternal and Child Health

In Thailand, the government has assigned a high priority to the problem of iron deficiency anemia in pregnancy and has incorporated the delivery of iron supplements into the nation's antenatal care (ANC) services. However, surveys indicate that iron deficiency anemia is still a problem in pregnant rural women. This project will assess existing iron supplementation delivery schemes and test two alternative schemes to deliver iron supplements to pregnant women. One scheme will use village drug funds as the distribution outlet for iron tablets, with the fund manager trained to impart correct nutrition information to clients; the other will incorporate a nutrition education component to the existing ANC services provided by the subdistrict health centres. The operational mechanisms of each scheme and the knowledge, attitudes, and practices of participants will be assessed. The analysis will focus on program coverage, cost effectiveness, and barriers to program participation.

/food enrichment/ /women/ /pregnancy/ /health services/
/health education/ /rural areas/
Area under study: /Thailand/

Commitment Date: 1989-04-04 Est. Completion: 1991-10-04

Recipient(s): Mahidol University, TH
Researcher(s): Pattanee Winichagoon

IDRC Contribution: \$ 73190 CAD

Status: Active

3-P-88-0221

Dracontiasis (Mali)

Division: HS Programme: Health and the Community

Dracunculosis, an incapacitating, essentially rural, water-borne parasitic disease is considered a high priority public health problem in Mali given the extent of its socioeconomic repercussions. Despite the rural water policy, which regulates the drinking water supply of the population and aims to control water-borne diseases, the main water sources, namely the surface waters, continue to carry cyclopides infested with *Dracunculus medinensis* larvae. The disease could be eradicated through water filtration with an inexpensive screen-filter. However, before introducing this technology in nomad communities, its acceptance by the population needs to be tested. This project will examine the epidemiology of dracunculosis in a nomad population. Researchers will survey the population's knowledge of the existing water treatment methods; research the socioeconomic consequences of dracunculosis in the research area; and identify the population's opinion on the introduction of the screen-filter.

/parasitic diseases/ /disease control/ /water treatment/
Area under study: /Mali/

Commitment Date: 1989-02-04 Est. Completion: 1990-02-04

Recipient(s): Institut national de recherche en santé
publique (INRSP), ML
Researcher(s): Niangaly, Adégné

IDRC Contribution: \$ 13270 CAD

Status: Active

3-P-88-0227

Impact of Vitamin A Supplementation on Childhood Morbidity and Mortality in Ethiopia

Division: HS Programme: Health Systems Research / Health and the Environment / Health and the Community

Recent research from Indonesia suggests that vitamin A deficiency in young children may lead to an increased risk of mortality (death) and morbidity (illness), that can be reduced by mass dose supplementation. This project will determine the efficacy of vitamin A supplementation on reducing the under-six-year-old mortality by at least 25%. Eighteen thousand children 6 to 72 months of age will be randomly assigned to receive either thrice yearly vitamin A supplementation or placebo and followed every four months. In addition, women who are in their second half of pregnancy will also be randomized to receive either small daily doses of vitamin A or placebo. The outcomes to be studied are childhood and infant mortality and questionnaire-based reports of morbidity. Researchers will also examine the impact of vitamin A supplementation on reduction in the prevalence of xerophthalmia and on childhood growth.

/vitamin deficiency/ /child mortality/ /children/ /morbidity/
/deficiency diseases/ /household surveys/
Area under study: /Ethiopia/

Commitment Date: 1989-05-24 Est. Completion: 1992-05-24

Recipient(s): Addis Ababa University, ET
Researcher(s): Beyene, Hagos

IDRC Contribution: \$ 961515 CAD

Co-funding Agencies:

International Center for Epidemiologic and Preventive
Ophthalmology (ICEPO), John Hopkins University

Status: Active

3-P-88-0233

Determinants of Protein-Energy Malnutrition (Malawi)

Division: HS Programme: Health and the Community / Maternal and Child Health

Protein energy malnutrition (PEM), one of the main nutritional deficiency disease, is a major public health problem in Malawi. Research that aims to help overcome this problem must be given high priority due to the substantial contribution of PEM to childhood morbidity and mortality. This project will assess the nutritional status of children aged 0-3 years in six rural communities in Mangochi district in the southern region of the country. The principal determinants of PEM in the study communities will also be investigated in terms of socioeconomic-cultural factors such as: socioeconomic status of the family; family structure; infant feeding practices; and the influence of seasonal variations in food availability. This project complements another IDRC-supported project in northern Malawi (Growth Faltering 3-P-87-0192).

/protein deficiency/ /malnutrition/ /children/ /social surveys/ /social aspects/ /economic aspects/ /cultural factors/

Area under study: /Malawi/

Commitment Date: 1989-10-31 Est. Completion: 1991-02-28

Recipient(s): University of Malawi, MW
Researcher(s): Kainja, Catherine

IDRC Contribution: \$ 59293 CAD

Status: Active

3-P-88-0243

Participatory Strategies in Water Supply (Costa Rica)

Division: HS Programme: Health and the Community / Water Supply and Sanitation

International aid agencies and government organizations in developing countries realize the importance of community participation in water supply and sanitation projects. From its inception, IDRC's handpump program has encouraged research in this area of community participation, as it considers it an essential component in going from pilot research projects to wide-scale dissemination of water supply and sanitation technologies. Between 1986 and 1988, the Centre supported a project in Costa Rica entitled, "Handpump Technology (Costa Rica)", 3-P-86-0018. This project looked into the adaptation of the UNIMADE handpump to the Costa Rican environment. As part of this project, the field staff developed a number of participatory strategies. These focused on community organization, health and hygiene education, and pump installation and maintenance. This project will build on these strategies, adapting them to include the participation of villagers as instructors in the introduction and use of water supply technologies. The project will also assess the technical feasibility of applying low-cost ferrocement construction techniques to the rehabilitation of shallow wells.

/water supply/ /social participation/ /training/ /pumps/
/wells/ /maintenance and repair/ /technical cooperation/
Area under study: /Costa Rica/

Commitment Date: 1989-03-14 Est. Completion: 1990-03-14

Recipient(s): Fundacion Tecnologica de Costa Rica (FUNDATEC),
CR

Researcher(s): Rosales-Escalante, Elias

IDRC Contribution: \$ 118760 CAD

Co-funding Agencies:

CIDA

Funding: \$ 13880 CAD

Status: Active

3-P-88-0251

Senegalese Society and AIDS (Senegal)

Division: HS Programme: Health and the Community

Although more resources are being allocated towards research on the identification and treatment of AIDS, the fact that very little is being done to assess whether or not strategies aimed at preventing the disease are understood and practised constitutes an increasingly serious problem, particularly in Africa. This project will collect basic information on how a representative sample of Cape Verde's general population and those at risk (prostitutes) comprehend, perceive, and protect themselves from this deadly disease. It will also study the level of acceptance of disease prevention measures linked to AIDS control; and identify the most efficient information channels for preventive measures. The investigation, based on a questionnaire oriented toward seropositive and AIDS patients, will be monitored by a multidisciplinary team in collaboration with all Senegalese institutions interested in AIDS.

/AIDS/ /prophylaxis/ /health education/ /consciousness
raising/ /social surveys/ /attitudes/
Area under study: /Cape Verde/

Commitment Date: 1989-06-17 Est. Completion: 1990-06-17

Recipient(s): Sénégal. Ministère du plan et de la coopération
, SN

Researcher(s): Barry, Martial

IDRC Contribution: \$ 73740 CAD

Status: Active

3-P-88-0252

Health and Nutrition in the Elderly (Jamaica)

Division: HS Programme: Health and the Community

Due to the changing age structure of the population in Jamaica, and the increasing number and proportion of elderly persons, the problems of the elderly require renewed and special attention. In particular, needs relating to their general health and nutritional status, and the social support they receive must be addressed. This study will review the general health status of the elderly; assess their nutritional status; and investigate the relationship of socioeconomic factors, dietary habits, lifestyle patterns, and informal support available to their nutritional status. Based on information collected, researchers will formulate recommendations to enable the planning of relevant programs and policies to prevent a decrease in the functional ability and quality of life of the elderly.

/aged/ /health conditions/ /health surveys/ /epidemiology/
/human nutrition/ /health planning/
Area under study: /Jamaica/

Commitment Date: 1989-03-21 Est. Completion: 1991-03-21

Recipient(s): University of the West Indies (UWI). Dept. of
Social and Preventive Medicine, JM
Researcher(s): Standard, Kenneth

IDRC Contribution: \$ 94180 CAD

Status: Active

3-P-88-0258

Dissemination of Ferrocement Rainwater Catchment System (FRCS)

Division: HS COMM CGT Programme: Research Results
Dissemination and Utilization / Health and the Community /
Project Activities / Water Supply and Sanitation

Ferrocement Rainwater Catchment System (FRCS) technology was tested and found to be socially acceptable and technically feasible in a preceeding IDRC-funded project "Rainwater Collection (Philippines)" (3-P-85-0031). The main objective of this project is to disseminate the technology to communities in the Province of Capiz, Philippines who do not have access to reliable sources of safe water but who live in areas which are physically and hydrologically suited to FRCS technology. Selected members of the target communities will be trained as FRCS trainers and technicians. Communication materials will be designed, tested, and produced to support the dissemination activities. A revolving fund will also be established to provide loans to families wanting to build the tanks but do not have the resources to purchase the construction materials required. Health education and community organization elements will be built into project activities to ensure that the FRCS tanks will have the desired impact in improving the health of communities and that the technology is adopted, installed, and maintained by members of various communities through a participatory approach.

/water storage/ /rain/ /drinking water/ /appropriate
technology/ /diffusion of innovations/ /community
development/ /training/ /health education/
Area under study: /Philippines/

Commitment Date: 1989-06-15 Est. Completion: 1994-06-15

Recipient(s): Capiz Development Foundation, Inc., PH
Researcher(s): Villareal, Cornelio L.

IDRC Contribution: \$ 302500 CAD

Co-funding Agencies:

CIDA
Funding: \$ 500000 CAD

Status: Active

3-P-88-0274

ORT/Health Education (Mexico)

Division: HS Programme: Health and Community / Maternal and Child Health

Oral Rehydration Therapy (ORT) has been one of the most important community health interventions of the 1980s. Diarrheal disease continues to be a major health problem in most developing countries. ORT will, therefore, continue to play an important role in preventing death due to dehydration. Mexico has a national ORT program and is committed to improving its statistics in diarrheal disease. In 1987 a research project was conducted in Hidalgo state to detect cultural problems related to acute diarrheal disease and its treatment. This present project is based on the findings from this in-depth study. The objective of this project is to increase the use of ORT among the rural poor and Indian populations in the states of Hidalgo and Oaxaca. Various communication techniques will be utilized including: a small comic book, a radio program, a personalized health education program with high-risk mothers, and a training program for community nurses. All interventions will be developed jointly with community members, and evaluated using quantitative and qualitative techniques.

/oral rehydration/ /diarrhoeal diseases/ /health education/
/communication/ /teaching aids/
Area under study: /Mexico/

Commitment Date: 1989-05-22 Est. Completion: 1990-11-22

Recipient(s): Grupo Consultor CICLOPE S.C., MX
Researcher(s): Cervantes, Maria Antonieta

IDRC Contribution: \$ 167560 CAD

Status: Active

3-P-88-0276

Attitudes Towards Abortion (Cuba)

Division: HS Programme: Health and the Community / Maternal and Child Health

Abortion is a frequent practice in Cuba, however, the psychological and sociological factors influencing this situation have not been investigated. Most studies have emphasized race, family income, housing conditions, etc. This project will determine the influence of certain cultural patterns on the likelihood of having an abortion. Women requesting an early termination of pregnancy will be interviewed to determine factors that contribute to the high abortion rate of the Havana City. Special emphasis will be placed on the study of attitudes towards abortion using the Likert attitude scale. The results will be used by the Ministry of Health to redirect its present family planning programs.

/abortion/ /attitudes/ /cultural factors/ /women/
/interviews/
Area under study: /Cuba/

Commitment Date: 1989-04-17 Est. Completion: 1990-04-17

Recipient(s): Instituto Nacional de Endocrinología, CU
Researcher(s): González Maicas, Patricia

IDRC Contribution: \$ 14030 CAD

Status: Active

3-P-88-0288

Cervical Cancer (Nicaragua)

Division: HS Programme: Health and the Community

In Nicaragua, prevention of morbidity and mortality from cervical cancer was identified as a national priority in 1981, but to date no adequate screening program has been launched. This study will examine the knowledge, attitudes, and practices of the female population aged 20 to 60 years to define the magnitude of the pathology and to determine how women can participate in programs for the prevention of cervical cancer. The government will use the findings to reorient the existing program for early detection of cervical cancer and to implement preventive measures with the assistance of women in the community.

/cancer/ /women/ /gynaecology/ /attitudes/ /behaviour/
/social surveys/ /prophylaxis/
Area under study: /Nicaragua/

Commitment Date: 1989-07-12 Est. Completion: 1991-10-12

Recipient(s): Nicaragua. Ministry of Health, NI
Researcher(s): Cabezas, Rommel Martinez

IDRC Contribution: \$ 44659 CAD

Status: Active

3-P-88-0298

Tuberculosis Defaulters (Nicaragua)

Division: HS Programme: Health and the Community

The irregularity and dropout rate of patients in tuberculosis (TB) treatment is one of the greatest problems for the Nicaragua National TB Control Program. In Managua (Region III), the dropout rate is presently over 30% and little is known about the reasons for this high rate. This project will determine factors contributing to this problem. TB patients (defaulters and non-defaulters) will be interviewed; and the functioning of health centres will be assessed. An intervention program will be developed based on collected information.

/tuberculosis/ /medical care/ /patients/ /attitudes/ /disease control/ /health centres/ /questionnaires/
Area under study: /Nicaragua/

Commitment Date: 1990-01-16 Est. Completion: 1991-01-16

Recipient(s): Centro de Investigación y Estudios de la Salud (CIES), NI

IDRC Contribution: \$ 54010 CAD

Status: Active

3-P-88-0301

Critical Risk Factors (Colombia)

Division: HS Programme: Health and the Community

The risk approach is an epidemiological and managerial tool for the organization of health services in which special attention is given to those in greatest need. To apply the risk approach, the risks, the population at risk, and the factors associated with that risk must be identified. Interventions are oriented towards priority risks and "critical" risk factors (i.e. those that are highly prevalent, strongly associated, easily identified, and modified). This project proposes to identify critical risk factors for the priority health problems (diarrheal disease, malnutrition, and acute respiratory infections) identified in six socioeconomically deprived communities in Colombia. Research will be undertaken within the framework of a community-oriented primary care teaching program in which students in the health professions and local health workers participate. The information obtained will be used to develop interventions specifically oriented towards reducing the morbidity and mortality attributed to these problems.

/diarrhoeal diseases/ /respiratory diseases/ /malnutrition/
/epidemiology/ /children/ /low income/ /health surveys/
/primary health care/
Area under study: /Colombia/

Commitment Date: 1989-07-17 Est. Completion: 1990-07-17

Recipient(s): Pontificia Universidad Javeriana. Departamento
de Medicina Preventiva, CO
Researcher(s): Kleven, Joanne

IDRC Contribution: \$ 17300 CAD

Status: Closed

3-P-88-0302

Preparation and Distribution of Weaning Foods (Peru)

Division: HS Programme: Health and the Community

In the shanty towns that surround the large cities of Peru, growth faltering of infants is a common occurrence once weaning (i.e. the introduction of foods in addition to breastmilk) is initiated. The reasons for this situation include inadequate nutritional quality of weaning foods, lack of frequent feedings, and a high incidence of diarrhea. This project will develop, implement, and evaluate a weaning food distribution system using community kitchens in a shanty town of Lima. Nutritionally appropriate, low-cost weaning food menus will be developed with mothers of small children. Education with respect to nutrition, food preparation, and hygiene will be reinforced through meetings and home visits. The success of the intervention will be evaluated by observing food preparation and distribution; by evaluating the opinions and attitudes of the participating mothers; by monitoring the growth of the study children; and by measuring changes in the mothers' knowledge, attitudes, and practices.

/weaning foods/ /food preparation/ /distribution/ /child development/ /slums/ /health education/ /mother/ /attitudes/ /social surveys/

Area under study: /Peru/

Commitment Date: 1989-06-09 Est. Completion: 1992-02-09

Recipient(s): Instituto de Investigacion Nutricional, PE
Researcher(s): Del Aguila, Roberto

IDRC Contribution: \$ 137415 CAD

Co-funding Agencies:

Fundacion Contra El Hambre

Status: Active

3-P-88-0323

Slum Improvement (Indonesia)

Division: HS Programme: Health and the Community

Rapid urbanization and the unrelentless growth of megacities are reaching crisis proportions in many developing countries of Asia. A host of environmental problems are adversely affecting the quality of life of city dwellers. Particularly affected are the less advantaged who are forced into congested slums lacking basic services such as safe drinking water and sanitary waste disposal. This project will examine the socioeconomic and physical environmental conditions of five slum communities along the Ciliwung River in Jakarta, Indonesia. Researchers will determine the knowledge, attitudes, and behaviour of residents on matters pertaining to the environment, disease transmission, and hygiene; identify environmentally related problems; and determine drinking water quality, water usage practices, and user demand. The data collected will provide the necessary information for the design and implementation of a second phase community-based intervention program.

/slums/ /living conditions/ /urban environment/ /water supply/ /drinking water/ /sanitation/ /surveys/
Area under study: /Indonesia/

Commitment Date: 1989-06-14 Est. Completion: 1990-06-14

Recipient(s): Wahana Lingkungan Hidup Indonesia (WALHI), ID
Researcher(s): Witoelar, Erna

IDRC Contribution: \$ 35229 CAD

Status: Active

3-P-88-0330

Nutrition Training and Education (Philippines)

Division: HS Programme: Health and the Community

In 1986 in the Philippines, a nutrition training program was developed jointly by the University of the Philippines and the Department of Health. The Department is interested in utilizing this training program on a national basis. This project will field test the community-based nutrition training package within the primary health care framework. Using a random sample from four communities in the national capital region, the research team will gather baseline information from the barangay health workers (BHWs), midwives, and community residents to assess current nutrition knowledge, nutrition practices and activities, problems in nutrition service delivery, and needs in terms of nutrition training; train the midwives and the BHWs in the use of the nutrition modules; and evaluate the changes in the BHWs performance following the training period. Based on project results, the Department will evaluate the feasibility of modifying, if necessary, and using the nutrition training package in the Philippine Nutrition Program.

/primary health care/ /paramedical personnel/ /training programmes/ /human nutrition/
Area under study: /Philippines/

Commitment Date: 1989-04-28 Est. Completion: 1991-04-28

Recipient(s): College of Public Health, University of the
Philippines, PH
Researcher(s): Salvosa-Loyola, Carmencita

IDRC Contribution: \$ 101000 CAD

Status: Active

3-P-88-0342

Maternal Nutrition in Subsistence Farmers (Malawi)

Division: HS Programme: Health and the Community

Within the subsistence economy of rural Malawi, women are largely responsible for most domestic and agricultural labour. Heavy labour, even in advanced stages of pregnancy, is common. The effect of such physical exertion, along with domestic food distribution practices, on the nutrition and health status of pregnant women is unknown. This project will examine the nutritional status of pregnant women engaged in agricultural activities in central Malawi, in relation to their work patterns, level of physical exertion, food intake, and use of prenatal care services. Cultural, social, and economic factors at the community and household levels will be examined. This information will lead to the identification of vulnerable groups and the reasons for their vulnerability. Research results will assist in the development of policies and programs aimed at reducing maternal malnutrition and death, and improving pregnancy outcome.

/women/ /farmers/ /subsistence farming/ /pregnancy/ /maternal and child health/ /malnutrition/ /food consumption/ /prenatal care/ /data collecting/ /data analysis/
Area under study: /Malawi/

Commitment Date: 1989-06-07 Est. Completion: 1991-06-07

Recipient(s): University of Malawi. Department of Home
Economics, MW
Researcher(s): Lamba, Christine S.

IDRC Contribution: \$ 245675 CAD

Status: Active

3-P-88-0344

Message for Improving Rural Hygiene (Nepal)

Division: HS Programme: Health and the Community

The health of the people of Nepal is very poor. A combination of mainly rural setting, lack of education, and lack of knowledge of diseases and their transmission has led to high morbidity (illness) and mortality (death) from communicable diseases. Health education must play a role in bringing about any behaviour change. Television and radio coverage is limited in the country. Therefore, person-to-person education is the most effective medium at present. The objectives of this project are the development of health education material; the delivery of a health education message through trained health workers; and the evaluation of the effectiveness of the health education material. The material will be prepared with the consultative assistance of the Voluntary Health Association of India (VHAI). Data will be collected on "knowledge, attitudes, and practice" (KAP) in a control and study population. It is hoped that the health education message will improve not only the people's knowledge, but also their hygienic practices.

/health conditions/ /hygiene/ /attitudes/ /health education/
/teaching aids/ /training assistance/ /social surveys/
/evaluation/
Area under study: /Nepal/

Commitment Date: 1990-12-23 Est. Completion: 1992-12-23

Recipient(s): Nepal. Ministry of Health, NP
Researcher(s): Shrestha, Shreebatsa P.

IDRC Contribution: \$ 25520 CAD

Status: Active

3-P-88-0359

Prevention of Persistent Diarrhea (Chile)

Division: HS Programme: Health and the Community

Previous studies indicate that in Chile deaths associated with diarrheal disease occur mainly in hospitalized patients with recurring, persistent episodes of diarrhea, which often become refractory to treatment. A statistical predictor for children likely to request treatment with persistent diarrhea has been developed. This project will identify sixty children under two years of age in southeastern Santiago in Consultorio La Faena who are at risk of prolonging a current episode of acute diarrhea. These children will be treated according to WHO recommendations. An educational program with their mothers will be undertaken to diminish the effect of persistent diarrhea. Researchers will evaluate the effect of the program. A quantitative evaluation, including anthropometric and epidemiological data, will be completed. Specific programs will then be proposed to the Ministry of Health.

/diarrhoeal diseases/ /children/ /disease control/ /health education/ /medical care/ /child care/ /evaluation/
Area under study: /Chile/

Commitment Date: 1989-07-26 Est. Completion: 1991-07-26

Recipient(s): Universidad de Chile, CL
Researcher(s): Araya, Magdalena

IDRC Contribution: \$ 66280 CAD

Status: Active

3-P-88-0378

Adolescent Sexuality Education (Colombia)

Division: HS SS Programme: Health and the Community /
Population, Education and Society

Adolescent sexuality education has become a priority in both Third World and developed countries. However, few projects have attempted to systematically determine and evaluate how best to communicate with adolescents about such a sensitive subject. This project will investigate the knowledge, attitudes, and practices of adolescents regarding sexuality; and design, implement, and evaluate an educational program based on these needs. Parents and teachers will be involved in the educational intervention. The project will take place in Usme, a semirural community near Bogotá, Colombia. Participatory educational methodologies will be utilized and evaluated throughout the project.

/sex education/ /adolescents/ /social surveys/ /attitudes/
/sexual behaviour/ /participatory research/ /social
participation/
Area under study: /Colombia/

Commitment Date: 1989-05-30 Est. Completion: 1992-05-30

Recipient(s): Comité Regional de Educación Sexual para
América Latina y el Caribe (CRESALC), CO
Researcher(s): Cardinal de Martin, Cecilia
Researcher(s): de Tafur, Matilde

IDRC Contribution: \$ 187300 CAD

Status: Active

3-P-88-0385

Childhood Diarrhoeal Disease (China)

Division: HS Programme: Health and the Community

The second most common cause of death among children in China is diarrhoeal disease. Previous incidence levels in Tianjin Ji county were estimated at around 20% although it is possible that the rates can be higher considering the magnitude of underreporting of the disease. Children under 5 years of age have an incidence of 2 to 20 episodes annually, averaging about four in most poor communities. Epidemiological research studies which examine the history of the disease, the burden of illness, and associated risk factors are exceedingly important due to the urgent need for information in health planning and the delineation of future health promotion strategies. This project will examine time trends in the disease occurrence, as well as the predisposing factors, in an effort to develop an appropriate health education strategy. The epidemiological study will be supplemented by laboratory procedures to determine the etiology of the illness and with interviews with health care providers and mothers to assess their current knowledge and practices regarding diarrhoeal disease.

/diarrhoeal diseases/ /children/ /epidemiology/ /disease
control/ /health education/
Area under study: /China/

Commitment Date: 1989-05-23 Est. Completion: 1991-05-23

Recipient(s): Tianjin Medical Institute, CN
Researcher(s): Ruo-Tao Wang

IDRC Contribution: \$ 79880 CAD

Status: Active

3-P-88-0401

Sexual Practices and Risk Factors for AIDS (Senegal)

Division: HS Programme: Health and the Community

The transmission of Human Immunodeficiency Virus (HIV) in Africa is thought to occur primarily by sexual contact among partners of the opposite sex. Education programs for the primary prevention of AIDS, therefore, have to focus on the modification of heterosexual behaviour. This requires a clear understanding of the cultural traditions and sexual practices of the target population. This project will investigate the sexual behaviour of adults in Senegal through a questionnaire survey of 1500 individuals from 450 randomly selected subdistricts. The questionnaire will collect demographic data of the respondents and administer a series of open-ended questions designed to generate nondirected responses about sexual behaviour. A smaller series of loosely structured interviews will be conducted with prostitutes, "matrons", and "traditional sex educators".

/sexual behaviour/ /disease transmission/ /AIDS/ /social surveys/ /questionnaires/
Area under study: /Senegal/

Commitment Date: 1989-09-25 Est. Completion: 1990-09-25

Recipient(s): ENDA/SYSPRO, SN
Researcher(s): Guisse, Youssouph Mb.

IDRC Contribution: \$ 42820 CAD

Status: Active

3-P-88-0402

Participatory Evaluation of PHC - AVESOL (Colombia)

Division: HS Programme: Health and the Community

AVESOL (Asociación Vecinos Solidarios) is a non-profit organization formed by a group of residents in the Barrio Atenas district of Bogotá as part of a process to try to improve conditions there. It has had the support assistance of the religious community "Hermanitas de la Asunción". This project will evaluate the AVESOL strategy for primary health care. The evaluation will include the general theoretical basis of AVESOL's work, its special features, and any new theoretical contributions which might be made; and a diagnosis of the health needs of the community. The research is expected to suggest new lines of action to involve the community as more active participators in the improvement of health. The community will take part in all stages of the research process from planning to analysis.

/primary health care/ /community development/ /social participation/ /evaluation/ /participatory research/ /health surveys/

Area under study: /Colombia/

Commitment Date: 1989-06-20 Est. Completion: 1990-06-20

Recipient(s): Asociación de Vecinos Solidarios (AVESOL), CO
Researcher(s): Lozano Pozzo, Nora

IDRC Contribution: \$ 60362 CAD

Status: Active

3-P-88-0405

Condom Acceptability and Use (Nigeria)

Division: HS Programme: Health and the Community

The condom, as a contraceptive device and also as a means to prevent sexually transmitted diseases, is of crucial importance to millions of people in developing countries, including Nigeria. Also, the emergence of AIDS has further escalated the importance of the condom as a device for promoting health. Unfortunately however, condoms enjoy very limited acceptability and use in Nigeria. In 1982, only 5.6% of respondents in a fertility survey had heard of the condom, while 0.8% had ever used the device. In an attempt to reverse this situation, this project will identify the social, religious, economic, psychological, and cultural factors that determine condom acceptance and use. A sample of 2250 sexually active persons drawn from three rural and three urban communities in two states will comprise the target population. The project will generate recommendations for appropriate measures that can be taken to remove barriers to the general acceptability and use of condoms.

/condoms/ /sexual behaviour/ /attitudes/ /value systems/
/social surveys/ /sexually transmitted diseases/ /disease
control/ /AIDS/

Area under study: /Nigeria/

Commitment Date: 1990-01-16 Est. Completion: 1992-01-16

Recipient(s): University of Nigeria. Dept. of Sociology and
Anthropology, NG

Researcher(s): Obikeze, Dan

IDRC Contribution: \$ 92765 CAD

Status: Active

3-P-88-0409

Personal and Domestic Hygiene/Diarrhea (Zimbabwe)

Division: HS Programme: Health and the Community

Diarrheal disease control is an important health concern in all developig countries, especially in the infant and young child population, which is most at risk for diarrhea. Efforts to improve water supply and sanitation facilities in rural communities have gone some way to alleviate the risk of transmission, but this is not enough. Reduction of illness and death from diarrhea must be achieved with an added improvement in personal and domestic hygiene practices. This project will attempt to study the "knowledge, attitudes, and practices" (KAP) of people living in rural Zimbabwean communities in relation to diarrheal disease, and to longitudinally monitor diarrheal illness. It will also identify hygiene practices that may be associated with disease transmission. It is expected that a follow-up study will subsequently be proposed, aimed at improving hygiene practices and reducing the risk of diarrhea through a health education program.

/diarrhoeal diseases/ /disease transmission/ /rural areas/
/hygiene/ /children/ /social surveys/
Area under study: /Zimbabwe/

Commitment Date: 1990-07-05 Est. Completion: 1992-01-05

Recipient(s): Zimbabwe. Ministry of Health, ZW
Researcher(s): Simango, Clifford

IDRC Contribution: \$ 95730 CAD

Status: Active

3-P-89-0022

Sexually Transmitted Diseases (Senegal)

Division: HS Programme: Health and the Community

Sexually transmitted diseases (STD), especially AIDS, have reached alarming proportions in Africa. This project will study the socioeconomic, cultural, and anthropological factors favouring or limiting STD transmission. Particularly, it will study sexual behaviour as related to marriage type, age and sex criteria, and ethnic, religious, and social characteristics as well as the seasonal tides in social behaviour such as migrations and social strategies in response to environmental changes. Related surveys will be carried out in the rural and urban multiethnic population of Kolda, Senegal. The results of the project will help to develop health education strategies aimed at the prevention of STD.

/sexually transmitted diseases/ /AIDS/ /sexual behaviour/
/social behaviour/ /social surveys/
Area under study: /Senegal/

Commitment Date: 1989-12-04 Est. Completion: 1991-04-01

Recipient(s): Université Cheikh Anta Diop, SN
Researcher(s): Niang, Ibrahima

IDRC Contribution: \$ 114960 CAD

Status: Active

3-P-89-0031

**Integrated Health Intervention For Childhood Diarrhoea
(Thailand)****Division: HS SS Programme: Health and the Community /
Population, Education and Society**

Diarrhoeal disease is one of the world's most critical public health problems, and is a major cause of illness and death among infants and young children in developing countries. The incidence rate of diarrhoea in Thailand has increased markedly in recent years, and as a result, the government has initiated two programs to reduce diarrhoeal disease in the country: ORS (oral rehydration salts) treatment, and improvement of water and sanitary facilities. Unfortunately, these programs are uncoordinated and are usually held one without the other, and often without the active participation of the community. This project will develop and test a community-based integrated health intervention program to reduce the incidence of diarrhoeal disease in the northeastern region. The intervention will involve the provision of safe drinking water sources and adequate sanitary facilities, and the introduction of an appropriate health education program, along with the provision of ORS treatment.

/diarrhoeal diseases/ /children/ /disease control/
/integrated approach/ /social participation/ /health
education/ /water supply/ /sanitary facilities/
Area under study: /Thailand/

Commitment Date: 1990-01-30 Est. Completion: 1992-07-30

Recipient(s): Khon Kaen University. Department of Medical and
Surgical Nursing, TH
Researcher(s): Earnporn Thongkrajai
Researcher(s): Pramote Thongkrajai

IDRC Contribution: \$ 189460 CAD

Status: Active

3-P-89-0057

Rural Enterprises (Latin America)

Division: AFNS HS EES FAD Programme: Post Production Systems -- Food Processing, Utilization and Nutrition / Agricultural Economics / Training for Institutional Development / Health and the Community / Technology for Local Enterprises

Within the Latin American region, IDRC has been supporting a number of projects aimed at identifying feasible opportunities for the establishment of rural enterprises as a means of improving the economies of rural communities. In a number of projects, technical results are promising. This project will aim to improve the probability of implementation of research results, in several projects currently funded in the region, through the provision of technical assistances and training. Specifically, the project will apply, evaluate, and refine a community agroindustrial enterprise development approach in eight projects funded by IDRC.

/rural industry/ /agroindustry/ /industrial development/
/diffusion of innovations/ /research projects/ /social participation/ /technical cooperation/ /training assistance/
/research capacity/

Area under study: /Latin America/

Commitment Date: 1989-10-12 Est. Completion: 1991-10-12

Recipient(s): Instituto Latinoamericano de Fomento
Agroindustrial (IFAIN), CR
Researcher(s): Koss, Manuel

IDRC Contribution: \$ 339300 CAD

Status: Active

3-P-89-0088

Analysis of Health and Nutrition Problems (Senegal)

Division: HS Programme: Health and the Community

In rural Senegal, protein-energy malnutrition is a major public health problem in children under five. Infant and child morbidity and mortality rates are also alarmingly high. This project will generate knowledge, which can help in the development of an intervention program to improve infant and child health. Researchers will explore attitudes, knowledge, and practices (KAP) of mothers, health care workers, and key informants regarding the health and nutritional needs of preschoolers; investigate the influence of interpersonal variables on the prevention or treatment of malnutrition; and develop a set of recommendations to guide the design of a culturally-relevant, appropriate intervention to improve the health and nutritional status of preschoolers.

/children/ /malnutrition/ /child care/ /attitudes/ /social surveys/ /health education/
Area under study: /Senegal/

Commitment Date: 1989-10-05 Est. Completion: 1990-10-05

Recipient(s): Centre d'enseignement supérieur en soins
infirmiers (CESSI), SN
Researcher(s): Ba, Saer Maty

IDRC Contribution: \$ 14150 CAD

Status: Active

3-P-89-0101

Mobilization of Private Sector Resources for Promotion of Immunization (Indonesia)

Division: HS COMM **Programme:** Health and the Community /
Health Systems Research / Communication Systems and
Technologies

An estimated 160,000 children in Indonesia die each year from six immunizable diseases: tuberculosis, diphtheria, whooping cough, tetanus, measles, and polio. Thousands of others suffer from related disabilities, which could be prevented through complete immunization. Lack of awareness about the benefits remains the most common reason for low immunization coverage or incomplete immunization. The community's knowledge about immunization could be increased if more information was made available and presented in a fashion that the community could understand and recognize as being significant. This project will identify the barriers to the acceptance of vaccination among the low socioeconomic population; develop and evaluate appropriate messages and media to facilitate the acceptance of vaccination; and stimulate demand for immunization services. The project will also identify and mobilize resources from private NGOs and the commercial sector to reproduce and disseminate the prototype messages and media.

/immunization/ /vaccination/ /children/ /attitudes/ /social
surveys/ /health education/ /information dissemination/ /mass
media/

Area under study: /Indonesia/

Commitment Date: 1989-12-22 Est. Completion: 1991-12-22

Recipient(s): Yayasan Kusuma Buana, ID
Researcher(s): Ieda Poernomo Sigit Sidi

IDRC Contribution: \$ 87480 CAD

Status: Active

3-P-89-0148

Community ORT Program (Nicaragua)

Division: HS Programme: Health and the Community

Acute diarrheal disease (ADD) continues to be a major health problem in most developing countries. In Nicaragua, ADD is the primary cause of death in childhood accounting for 40% of all infant mortality. Oral Rehydration Therapy (ORT) has been one of the most important community health interventions of the 1980s and plays a major role in preventing death due to dehydration. Nicaragua has a national ORT program, and is committed to improving the acceptability and use of ORT. This project will determine the effectiveness of a community-based ORT program. Mothers' attitudes and knowledge relating to ADD will be evaluated; the ongoing functioning of the present Oral Rehydration Units (ORU) will be examined; the knowledge and attitudes of the ORU staff will be looked at; and various popular education strategies will be tested. Both rural and urban areas will be sampled.

/diarrhoeal diseases/ /children/ /oral rehydration/ /health education/ /social participation/ /social surveys/ /attitudes/ /mother/ /paramedical personnel/
Area under study: /Nicaragua/

Commitment Date: 1990-06-12 Est. Completion: 1991-11-15

Recipient(s): Universidad Nacional Autonoma de Nicaragua, NI
Researcher(s): Toruno, Arnoldo

IDRC Contribution: \$ 76466 CAD

Co-funding Agencies:

UNICEF

Status: Active

3-P-89-0159

Determinants of Contraceptive Use and Effectiveness (China)

Division: HS Programme: Health and the Community

China has an outstanding policy record in population control. However, recent evidence suggest that the initial success of the policy may not be as sustained as expected. This project will support an evaluation of the family planning program in Yangzhou, China. The study will attempt to identify specific factors associated with the abandonment of contraception and unwanted pregnancy among program clients. Sources of contraceptive failure related to the program structure and delivery; method of contraception; and clients of the program will be considered. Researchers will assess the level of contraceptive use-effectiveness of different methods; determine the factors that account for the termination of use; assess the pregnancy rate and its consequences; and assess the effect of provider characteristics on use-effectiveness at the individual level. Project results will be used to increase the effectiveness and relevance of the family planning program, and thereby help to improve the health of families, particularly the mothers.

/family planning programmes/ /evaluation/ /contraception/
/decision making/ /social surveys/
Area under study: /China/

Commitment Date: 1990-01-29 Est. Completion: 1991-01-29

Recipient(s): Nanjing College for Family Planning
Administrators, CN
Researcher(s): Sun Fengmin

IDRC Contribution: \$ 77190 CAD

Status: Active

3-P-89-0170

Breastfeeding Practices and Working Mothers (Indonesia)

Division: HS Programme: Health and the Community

During the 1980s, Indonesia experienced rapid urbanization and an increasing participation of women in the labour force. Almost 30% of these women work in Jakarta, a large proportion of them in factories. This project will determine the practices and problems related to promoting and protecting breastfeeding in the workplace. Specifically, researchers will assess knowledge, attitudes, and practices (KAP) of working mothers about breastfeeding; assess the knowledge and attitudes of the factory owners and managers about the importance of breastfeeding; assess the existing status of government regulations regarding the protection of female workers, with special emphasis on policies relating to breastfeeding practices in the workplace; and identify the existing programs and facilities that affect breastfeeding practice in the workplace. Researchers will also develop and recommend policies and intervention strategies to promote breastfeeding in the workplace, and thereby improve the nutritional status of under-fives in the country.

/breast feeding/ /women workers/ /working conditions/ /urban areas/ /social surveys/ /attitudes/ /legal aspects/ /maternal and child health/ /policy making/
Area under study: /Indonesia/

Commitment Date: 1990-10-17 Est. Completion: 1992-07-17

Recipient(s): University of Indonesia. Department of
Nutrition, ID
Researcher(s): Matulessy, Paul Frans

IDRC Contribution: \$ 58354 CAD

Status: Active

3-P-89-0173

Educational Strategy to Reduce Contraceptive Failure in Urban China

Division: HS Programme: Health and the Community

China faces a critical stage in her massive population program. the "one-child" family is still the official aim, and contraceptive use has increased. But, abortion has also increased. There is concern that the widespread use of abortion may have an adverse effect on the health of the mothers. This project will develop a health education program to promote more effective contraception and conscientious use, so as to reduce unwanted pregnancies and, hence, induced abortion. The study site is the Lu Wan District of Shanghai. Twenty-one medium-sized factories and six middle schools in this district will be selected for inclusion in the study. Before and after surveys will be administered to assess the effect of the health education effort. Data from the surveys, combined with clinical data at the study sites, will be analyzed, using, amongst others, the life table technique, to assess the relative effects of the different health education inputs. The findings will serve as a basis for developing an effective program of health education to be extended to the community, not only within the Lu Wan District, but also to the rest of Shanghai and other urban places.

/contraception/ /health education/ /family planning
programmes/ /urban areas/ /social surveys/
Area under study: /China/

Commitment Date: 1990-03-03 Est. Completion: 1993-03-03

Recipient(s): Lu Wan District Maternity and Child Health
Hospital, CN
Researcher(s): Zhou Mei Rong
Researcher(s): Lu Shu Hua

IDRC Contribution: \$ 224990 CAD

Status: Active

3-P-89-0195

**Sociocultural Factors Influencing Contraceptive Behaviour
(Indonesia)****Division: HS Programme: Health and the Community**

A national family planning program has been administered in Indonesia since the late 1960s to slow down its population growth. The program serves to support widespread contraceptive use and promotes the ideal of the small family. Presently, there is much uncertainty in the process of decision making about accepting or rejecting and continuing or terminating contraceptive use. This decision making is affected by various factors. This project will examine the dynamics of decision making from the early stage of being informed to the late stage of continuing or terminating contraceptive use; and how certain factors influence these dynamics. Eight villages will be selected in East Java, Indonesia, on the basis of geographical and sociocultural characteristics. A sample of 320 married women of 15 - 44 years and their husbands will be selected and interviewed. Findings will contribute to policy decision making in the family planning programs.

/family planning programmes/ /contraception/ /attitudes/
/value systems/ /decision making/ /case studies/
Area under study: /Indonesia/

Commitment Date: 1990-03-01 Est. Completion: 1991-03-01

Recipient(s): Yayasan Pelayanan Dan Pengembangan Masyarakat
Desa, ID
Researcher(s): Sismanto, Yoseph

IDRC Contribution: \$ 50040 CAD

Status: Active

3-P-89-0210

Integrated Community Nutrition (Thailand)

Division: HS SS COMM FAD Programme: Health and the
Community / Population, Education and Society / Community
Participation Processes / Training for Project Development

Despite the overall strengthening of Thailand's economy in recent years, many Thais remain undernourished. The problem is particularly serious in the northeastern region where agricultural and socioeconomic conditions are poor. This project will formulate and implement appropriate nutritional improvement programs for the region. Specifically, the project will train and integrate multidisciplinary research teams; evaluate present food and socioeconomic systems at the community level; assess the influence of existing nutrition intervention programs; and define food habits and behaviour as a guide to the design of nutrition education programs. The collaborating institutions have formed a national network to address factors affecting nutritional status in the northeastern provinces. The project is an outcome of this network, and will lead to a second phase activity to develop and disseminate appropriate policies/interventions for nutritional improvement. It is expected that the project will also serve as a training venue for other nutrition workers in the Asian region.

/human nutrition/ /food consumption/ /food security/ /health
education/ /programme planning/ /training/ /nutrition
research/ /research networks/ /integrated approach/
Area under study: /Thailand/

Commitment Date: 1990-04-27 Est. Completion: 1991-09-30

Recipient(s): Mahidol University, TH
Researcher(s): Aree Valyasevi

IDRC Contribution: \$ 214400 CAD

Co-funding Agencies:

Thailand. Ministry of Agriculture and Cooperatives
Thailand. Ministry of Public Health

Status: Active

3-P-89-0212

Approtech Asia Information System on Water and Sanitation -
Phase IIDivision: HS IS FAD Programme: Socioeconomic Information --
Socio-Cultural Information Systems

Under phase I of this project, Approtech Asia (Asian Alliance of Appropriate Technology Practitioners) implemented a Water and Sanitation Information System. Central to the project was the construction and maintenance of data bases on experts, community-based projects, and literature produced by or appropriate to grassroot nongovernmental organizations (NGOs) in the region; and the dissemination of information. Major activities were the design and testing of a computerized system using the CDS-ISIS software; data collection and description; establishment of institutional linkages; and promotional activities. Phase II will bring the project into the mainstream of grassroot community development activities. New components focus on training NGOs through the CIPS (Community Information and Planning System) method to document their work with the help of villagers; and to handle and use databases to repackage information into messages that are appropriate for the villagers. The project will strengthen the capabilities of selected NGOs in India, Indonesia, and Sri Lanka to handle information as they go about executing their community-based water and sanitation programs.

/water supply/ /sanitation/ /information systems/
/non-governmental organizations/ /information services/
/training/
Area under study: /Asia/ /India/ /Indonesia/ /Sri Lanka/

Commitment Date: 1990-03-12 Est. Completion: 1993-03-31

Recipient(s): Approtech Asia, PH
Researcher(s): Oblepias-Ramos, Lilia

IDRC Contribution: \$ 307720 CAD

Status: Active

3-P-89-0218

Child Nutrition and Agriculture (Nigeria)

Division: HS Programme: Health and the Community

This project will assess the impact of the Oyo North Agricultural Development Project (ONADEP) on the nutritional and health status of young children in the 0-10 year age group. The study will generate nutritional data, as yet unavailable in Nigeria, and will provide an indication of the effects of structural adjustment and agricultural change on human wellbeing. Specifically, the project aims to compare the health and nutritional status of the target group in ONADEP and a nonproject area; identify barriers to good health and nutrition among children and mothers in the study area; and devise and promote means to improve nutrition and health of children in rural areas. The results will be used to guide action and policy to improve nutritional status and maintain nutrition security of groups vulnerable to malnutrition. The project will be an important component of a network of Centre-supported community nutrition projects in West Africa.

/agricultural development/ /agricultural projects/ /social implications/ /human nutrition/ /children/ /maternal and child health/ /health conditions/ /household surveys/ /comparative analysis/
Area under study: /Nigeria/

Commitment Date: 1990-03-02 Est. Completion: 1991-12-31

Recipient(s): Obafemi Awolowo University, NG
Researcher(s): Olusi, S.O.

IDRC Contribution: \$ 236000 CAD

Status: Active

3-P-89-0221

The Family House: A Public Health Soap Opera (Egypt)

Division: HS COMM Programme: Health and the Community /
Communication Systems and Technologies

In Egypt and other Middle Eastern countries, a large percentage of the population remains illiterate and unaware of modern health concepts. Ministry of Health services remain underutilized for prenatal care, delivery, and postpartum services. Traditional health education systems are expensive and have failed to have much of an impact. Television reaches nearly 90% of the population of the Middle East. The Centre for Development Communication (CDC) in Cairo has been successful in harnessing the power of television for health education, especially in the popularization of Oral Rehydration Therapy. In this project, the CDC will experiment with the most popular of television formats in the Middle East: the soap opera, to determine if attitudes, opinions, and health practices can be changed through character identification and social value reinforcement.

/health education/ /television/ /maternal and child health/
/social change/ /social values/ /social surveys/
Area under study: /Arab countries/ /Egypt/ /Morocco/ /Jordan/

Commitment Date: 1990-02-21 Est. Completion: 1992-08-21

Recipient(s): Centre for Development Communications, EG
Researcher(s): Elkamel, Farag M.
Researcher(s): Nasr, Essam

IDRC Contribution: \$ 117000 CAD

Co-funding Agencies:

Ford Foundation
Funding: \$ 170000 CAD

Johns Hopkins University
Funding: \$ 182000 CAD

Status: Active

3-P-89-0222

Working Mothers and Their Children: Health Risks and Needs

Division: HS SS Programme: Health and the Community /
/Population, Education and Society

Health risks of working mothers, and their children is an area relevant to maternal child care programs in Mexico. This project focuses on the health needs and risks of working mothers, and their children. Researchers will explore the specific perinatal health risks to mothers and infants of certain types and conditions of maternal employment, as well as the effects on child health of inadequate child care arrangements. Specific objectives are to contribute to knowledge regarding the conditions of women's work; make recommendations as to how to prevent specific risks to the health of women and children; make use of existing knowledge on this matter for policy purposes; involve women's and worker's organizations; disseminate the results of research projects and recommendations derived from them; train local investigators; and strengthen networking activities among individuals and institutions working in this area.

/women workers/ /working conditions/ /maternal and child health/ /health conditions/ /child care/ /needs assessment/ /policy making/
Area under study: /Mexico/

Commitment Date: 1990-02-06 Est. Completion: 1992-07-31

Recipient(s): Population Council, US
Researcher(s): Stern, Claudio

IDRC Contribution: \$ 242930 CAD

Status: Active

3-P-89-0226

AIDS Counselling and Education (Dominican Republic)

Division: HS Programme: Health and the Community

In the Dominican Republic, the first four AIDS cases were diagnosed in 1983. Since then, the number of cases has been doubling every six to twelve months. The total estimated number of HIV (Human Immunodeficiency Virus) positive individuals is 60,000. Due to this increase, detailed knowledge of the sexual behaviour of individuals testing HIV positive and those presenting themselves for blood testing is needed. This project will develop and evaluate a program that will focus on the prevention of further transmission, and on emotional support and counselling for patients. Researchers will identify reasons for self-presentation for HIV testing; identify sexual behaviour including HIV risk behaviours in this group; identify other risk factors that could be related to the presence of HIV; and compare the effectiveness of individual versus group therapy, which provide emotional support, education, information, and psychological or psychiatric treatment. Personnel training will also be provided. It is expected that the program developed will be integrated into the National Program for the Control of AIDS.

/AIDS/ /disease control/ /disease transmission/ /sexual behaviour/ /health education/ /psychological aspects/ /group discussion/

Area under study: /Dominican Republic/

Commitment Date: 1990-03-26 Est. Completion: 1992-03-26

Recipient(s): Instituto de Sexualidad Humana, DO
Researcher(s): Garcia, Raphael

IDRC Contribution: \$ 114556 CAD

Status: Active

3-P-89-0227

Iodine Deficiency Control (India)

Division: HS Programme: Health and the Community

Iodine deficiency disorders (IDD) are a significant public health problem in India. It is estimated that 150 million people in the country are afflicted with IDD. In addition to goitre and cretinism, IDD is linked to neurological defects, stunted growth, still births, and reproductive failure. This project will determine the prevalence of IDD in two "at risk" populations: women of reproductive age and adolescents in both the slums of Bombay and in the districts of Amravati and Dhule. Iodine intake will also be assessed, and the knowledge and perceptions of community members regarding IDD and the iodization of salt will be investigated. It is expected that the findings will be used by the government to improve their policies and programs aimed at the prevention and control of IDD.

/deficiency diseases/ /epidemiology/ /women/ /adolescents/
/food consumption/ /salt/
Area under study: /India/

Commitment Date: 1990-10-12 Est. Completion: 1992-10-12

Recipient(s): Shreemati Nathibai Damodar Thackersey Women's
University. Dept. of Postgraduate Studies and
Research in Home Science, IN
Researcher(s): Dodd, N.S.

IDRC Contribution: \$ 37683 CAD

Status: Active

3-P-89-0233

Infant Feeding and Diarrhoeal Disease

Division: HS Programme: Health and the Community

Small children from areas of developing countries start to deviate from standard growth patterns at about the fourth month of life. Among the many factors associated with growth faltering during early childhood are diarrhoeal diseases due to enteric infections. These infections recur frequently, especially during the weaning period, and are difficult to prevent given the present environmental characteristics of many areas. This project will be undertaken in Kenya to explore ways to reduce growth faltering caused by nutrient loss and increased metabolism due to diarrhoea. Enrolled infants will receive a locally available dietary regimen during diarrhoeas and throughout a recuperation period. The effectiveness of the regimen will be assessed until the infants reach the age of 12 months. The study will contribute important recommendations regarding the management of diarrhoeal disease.

/infants/ /feeding/ /human nutrition/ /diarrhoeal diseases/
/child development/ /diet/ /evaluation/
Area under study: /Kenya/

Commitment Date: 1990-09-21 Est. Completion: 1992-12-21

Recipient(s): University of Nairobi. Dept. of Food Technology
and Nutrition, KE
Researcher(s): Thiuri, Bernadette

IDRC Contribution: \$ 40156 CAD

Status: Active

3-P-89-0241

Seasonal Hunger and Nutrition (Kenya)

Division: AFNS HS Programme: Post Production Systems /
Health and the Community

While in some parts of Kenya soil types and rainfall patterns allow for a relatively stable production of food surplus, in other areas with marginal climatic conditions production levels are low and tend to fluctuate throughout the year. The seasonal nature of agricultural production leads to fluctuations in food availability and intake, exacerbated by population pressures on available arable land. Small-scale farmers and the landless are increasingly vulnerable to the effects of these fluctuations. This project will investigate the extent to which seasonality in food availability affects the nutritional status of this group. The project will identify which members of the household are most vulnerable to the effects of seasonal hunger and the reasons for their relative vulnerability; and will comprise regular measurement of food intake, food distribution, and nutritional status of individuals in the households over an 18-month period to allow for a coverage of two hungry seasons. Strategies to cope with seasonal food shortages will be examined, and recommendations will be made regarding how the rural poor may be buffered against any deleterious effects of seasonal hunger.

/food production/ /seasonal fluctuations/ /food shortage/
/hunger/ /malnutrition/ /agricultural workers/ /small farms/
/squatters/

Area under study: /Kenya/

Commitment Date: 1990-03-19 Est. Completion: 1991-09-19

Recipient(s): Egerton University. Department of Home
Economics, KE
Researcher(s): Kigutha, Hilda N.

IDRC Contribution: \$ 56097 CAD

Status: Active

3-P-89-0242

Women's Status and Fertility in the Gusii Community (Kenya)

Division: HS Programme: Health and the Community

In many areas of Kenya, high population growth has resulted in overcrowding, landlessness, unemployment, and concomitant social problems. These problems have been particularly noted in the Gusii community. Traditionally, within this ethnic group, early marriage, and regular and continued bearing of children conferred high status on a woman. Whether women's status currently influences high fertility is unknown. This project will explore how women's current status in the Gusii community relates to their reproduction decisions. Among the indices of women's status to be investigated are: educational achievement, occupational roles, economic rank, wife's position vis-à-vis husband's, and socio-cultural context which is equally likely to influence women's fertility behaviour.

/women/ /women's status/ /fertility/ /ethnic groups/ /family planning/ /decision making/ /social conditions/ /cultural factors/ /ethnography/ /questionnaires/
Area under study: /Kenya/

Commitment Date: 1990-02-20 Est. Completion: 1990-10-20

Recipient(s): University of Nairobi, KE
Researcher(s): Moogi, Gwako Laban

IDRC Contribution: \$ 2904 CAD

Status: Closed

3-P-89-0243

Food Security and Nutritional Status of Households (Congo)

Division: HS Programme: Health and the Community

A high incidence of malnutrition characterizes the central highlands and the Mayombe range in the Republic of Congo. There is a lack of information about the factors contributing to this situation. Research will be undertaken in this project to identify causative factors and vulnerable groups to ensure food security. Specifically, the project will assess the nutritional status of rural households; estimate food availability according to patterns of production and distribution; assess the relation between nutritional status and morbidity (illness) as well as social status; and study the technological conditions of food production and conservation. This project is closely related to similar IDRC projects initiated in Benin and Nigeria.

/malnutrition/ /food supply/ /household/ /food production/
/food technology/

Area under study: /Congo/

Recipient(s): Organisation de recherche scientifique et
technique d'outre-mer (ORSTOM), CG
Researcher(s): Tchibindat, Félicité

IDRC Contribution: \$ 104000 CAD

Status: Active

THU, JUL 18, 1991

3-P-89-0248

Mass Media and Oral Health (Kenya)

Division: HS COMM Programme: Health and the Community /
Dissemination, Methods and Systems Unit

In a previous project "Chewsticks Research (Kenya)" (3-P-84-0338) the use of chewsticks for oral hygiene was found to be widespread in the country, with over 250 species of plants being used for this purpose. Clinical studies demonstrated that chewsticks were as effective in maintaining good oral hygiene as conventional manufactured toothbrushes, and similar effects were obtained by chewsticks used with or without toothpastes. This project will disseminate the findings of that study to rural and periurban populations. A public awareness campaign will include radio programs in both English and the vernacular, and a newspaper supplement in English to be inserted in two national daily newspapers. Before dissemination, the understanding of the message will be pretested through focus group discussions.

/dentistry/ /disease control/ /hygiene/ /traditional
medicine/ /health education/ /radio/ /press/ /research
results/ /information dissemination/
Area under study: /Kenya/

Commitment Date: 1990-09-24 Est. Completion: 1991-09-24

Recipient(s): Mazingira Institute, KE
Researcher(s): Lamba, Davinder

IDRC Contribution: \$ 45483 CAD

Status: Active

3-P-89-0251

Biomedical and Sociocultural Dimensions of Sickle Cell Anemia (Nigeria)

Division: HS Programme: Health and the Community

Sickle Cell Anemia (SCA) is the most fatal and common genetic abnormality in Africa. Because of the numbers involved and the morbidity (illness) associated with the disease, health maintenance of the SCA patients is a public health priority. In Nigeria, as in many African countries, the problem of SCA has not received research attention beyond its biomedical and laboratory aspects. This project will describe the natural history of the disease; explore the cognitive dimensions and cultural practices, as well as biomedical patterns of the disease in selected children; and develop and test a health education package and primary care guidelines for families and individuals living with SCA.

/deficiency diseases/ /human genetics/ /children/
/epidemiology/ /parents/ /attitudes/ /cultural factors/
/traditional medicine/ /health education/ /primary health
care/ /questionnaires/
Area under study: /Nigeria/

Commitment Date: 1990-12-05 Est. Completion: 1995-12-05

Recipient(s): Obafemi Awolowo University Teaching Hospital,
NG
Researcher(s): Adekile, Adekunle Dada

IDRC Contribution: \$ 122920 CAD

Status: Active

3-P-89-0304

Health Communication (Papua New Guinea)

Division: HS COMM FAD Programme: Communications Systems and Technologies

Children under five years of age living in Enga Province of Papua New Guinea are being seriously affected by diarrhoeal diseases. This project will develop and test a set of prototype health communication materials and strategies, which are aimed at improving the sanitary behaviour of the mothers of the affected children. Members of the Yanarin Tribe will participate in this project. The first activity will involve the conduct of a knowledge, attitudes and practices (KAP) survey at the project site. This will lead to the formulation of key messages and the design of prototype communication materials and strategies. The next step will involve the pretesting of the prototype materials and communication strategies in a series of health promotion campaigns conducted amongst individual clans of the tribe. Finally the KAP survey will be repeated to gauge the effectiveness of the materials and strategies. The communication strategies and prototype materials will be used in health education campaigns across Wabag District if they are found to be effective. To ensure the quality of research, three key project staff will receive training.

/diarrhoeal diseases/ /children/ /sanitation/ /social surveys/ /attitudes/ /health education/ /mass communication/ /audiovisual materials/ /training/
Area under study: /Papua New Guinea/

Recipient(s): Papua New Guinea. Department of Enga, PG
Researcher(s): Yali, Jonathan Harris

IDRC Contribution: \$ 115416 CAD

Status: Active

3-P-89-0316

Urban Food Security (Central America)

Division: HS Programme: Health and the Community

Government policies and programs often discourage self-reliant efforts at the community level. For the poor to effectively participate in decision-making, they need to acquire an understanding of issues which transcend their immediate community concerns. This project, undertaken by the International Food Policy Research Institute (IFPRI), will examine and foster the integration of community-based development and policy planning, particularly related to food security, health, and nutrition of the urban poor. The project will take place in three different urban environments in Central America, through collaboration of IFPRI with local institutions in Guatemala, Costa Rica, and Nicaragua. Specifically, the project will sensitize political and technical levels to community needs; and promote joint action planning and implementation for nutritional and health improvement in urban areas. The project reflects Centre concerns for applying participatory research in confronting urban nutrition problems and is associated with a Centre-supported project in three cities of India.

/food security/ /human nutrition/ /public health/ /quality of life/ /community development/ /social participation/ /self-reliance/ /policy making/ /development planning/ /low income/ /urban areas/
Area under study: /Central America/ /Guatemala/ /Costa Rica/ /Nicaragua/

Commitment Date: 1990-08-01 Est. Completion: 1991-07-31

Recipient(s): International Food Policy Research Institute
(IFPRI), US
Researcher(s): Immink, Maarten D.C.

IDRC Contribution: \$ 126900 CAD

Status: Active

3-P-89-0324

Social Analysis of AIDS (Uganda)

Division: HS Programme: Health and the Community

By the end of 1989, more than 10,000 cases of AIDS had been reported to the Ugandan Ministry of Health. The National AIDS Control Program (ACP) launched prevention and control activities in 1987, that included social as well as clinical research. However, a baseline survey that uncovers the perceptions and behaviours of Ugandans has yet to be undertaken. This study, cofunded with the World Health Organization (WHO) Global Program on AIDS (GPA) seeks to fill that need. Researchers will ascertain the levels of knowledge and awareness of the population on AIDS; identify sexual behaviours; discover what people think about HIV, AIDS, and the treatment and care of sufferers; and assess relationships between KABP/partner relations and individual responses. Three thousand respondents drawn from around the country in the age group 15 to 55 will be recruited. The results will be used to provide data for policy and program interventions; build local capacities for research and care giving; and contribute information to the international search for containing the spread of AIDS.

/AIDS/ /social surveys/ /attitudes/ /sexual behaviour/
/disease transmission/ /disease control/ /medical care/
Area under study: /Uganda/

Commitment Date: 1990-08-31 Est. Completion: 1991-08-31

Recipient(s): Makerere University. Dept. of Social Work and
Social Administration, UG
Researcher(s): Ankrah, E. Maxine

IDRC Contribution: \$ 61250 CAD

Co-funding Agencies:

WHO

Funding: \$ 14110 CAD

Status: Active

3-P-89-0336

Height-weight Gain of Beninese Children

Division: HS Programme: Health and the Community

In developing countries, like Benin, the average age of the population is very low, children under 5 years of age constituting 25% of the total. This group, which is particularly vulnerable to diseases, has a 40-50% share in the total mortality. The high rate of mortality is conditioned by malnutrition. Recognizing the fact that the prevention of protein malnutrition has to be based on continuous nutrition surveillance and education, this project will establish growth norms as indicators of a child's development relevant to the particular conditions of the country, norms which are to be compared to foreign norms or reference curves. It will determine the onset of malnutrition and its incidence; and will detect nutritional abnormalities in their clinical stage. This will be a longitudinal study of a group of children from different age groups. A simultaneous health education program for the children in the sample will be provided at home by a visiting physician.

/child development/ /malnutrition/ /measurement/ /child mortality/ /nutrition research/ /health education/
Area under study: /Benin/

Recipient(s): Université nationale du Bénin. Département de
Pédiatrie et Génétique, BJ
Researcher(s): Ayivi, Blaise

IDRC Contribution: \$ 39280 CAD

Status: Active

3-P-89-0337

Study of the Socio-cultural Aspects of Epilepsy in Senegal

Division: HS Programme: Health and the Community

Senegal has a very high incidence of epilepsy. The social and cultural dimensions of the disease are very significant. Society, through the family and the traditional practitioner, has an essential role in patient care. This could lead to either the reintegration or social rejection of the patient, depending on the traditions and values of specific ethnic communities. This project will study the complex and contradictory process of socio-cultural integration of and behaviour toward the epileptic, with the contribution of the patient himself, the family, and the traditional practitioner. It will further study the case history of each study patient from medical and traditional points of view; the experience and living patterns of various partners; the psychological aspect of the relations between the actors; and the healing methods, ideologies, myths, and religious beliefs of the various ethnic communities.

/chronic diseases/ /brain/ /social behaviour/ /cultural factors/ /tradition/ /attitudes/ /ethnic groups/
Area under study: /Senegal/

Commitment Date: 1990-07-11 Est. Completion: 1991-03-31

Recipient(s): ENDA - Systèmes et prospectives, SN
Researcher(s): Thiam, Ismaïla

IDRC Contribution: \$ 40440 CAD

Status: Active

3-P-89-0340

Child Development in Yorubaland Compared With Denver

Division: HS Programme: Health and the Community

Early identification of childhood developmental disabilities is very critical to its effective management. The federal government of Nigeria has included a device to facilitate the early identification of children with this problem by primary health workers. However, a critical look at the developmental assessment guideline in the primary health care workers practice manual (The Standing Orders) reveals its gross inadequacy as a developmental assessment tool. There is, therefore, a need for a developmental screening test for preschool children which is valid, reliable, and suitable for mass screening; and which has norms that are specific to Nigerian children. From experience, only the Denver Developmental Screening Test (DDST) comes closest to meeting these requirements. This project will administer this test to a sample of Nigerian children to see how it can be validated and/or adopted for use in the context of Nigeria's environmental and cultural conditions.

/early childhood/ /child development/ /tests/ /preschool education/ /educational planning/ /primary health care/
Area under study: /Nigeria/

Commitment Date: 1990-07-26 Est. Completion: 1991-03-31

Recipient(s): Lagos University Teaching Hospital, NG
Researcher(s): Akhilele, Grace I.

IDRC Contribution: \$ 6163 CAD

Status: Active

3-P-89-0346

Rural Sanitation in South Africa

Division: HS Programme: Health and the Community

Inadequate sanitation is one of the major factors in the spread of infectious diseases. Over 95% of people living in rural and peri-urban communities of South Africa do not have adequate sanitation. The purpose of this project is to further develop and refine a manual on rural sanitation, a draft of which has already been prepared. The manual is aimed at community fieldworkers and health workers, and is premised on the need to tackle the problem of inadequate sanitation through the building of community-based democratic organization. The manual is to be field-tested in rural areas and will form the basis for training community-based trainers for a sanitation initiative in the country.

/sanitation/ /toilets/ /technical aspects/ /health education/
/manuals/ /testing/
Area under study: /South Africa/

Commitment Date: 1990-08-08 Est. Completion: 1991-08-08

Recipient(s): Consultancy for Alternative Education, CA
Researcher(s): Collins, Rob

IDRC Contribution: \$ 55675 CAD

Co-funding Agencies:

Oxfam

Funding: \$ 7200 CAD

Development and Peace

Funding: \$ 10000 CAD

Status: Active

3-P-89-1037

Community Participation in PHC (Botswana)

Division: HS Programme: Health and the Community

Community participation has been recognized as crucial for the attainment of "Health For All by the Year 2000". Primary health care (PHC) and community participation were the two main pillars identified by the government of Botswana to attain this goal in the country. This project will gather in-depth information on community participation, PHC, and the role of the nurse in community participation. The teams will work in three rural communities. The findings will be used to assess and reorient health care planning, policy making, and nursing education.

/primary health care/ /social participation/ /community development/ /nurses/

Area under study: /Botswana/

Commitment Date: 1990-03-02 Est. Completion: 1991-03-12

Recipient(s): University of Toronto, CA

Recipient(s): University of Botswana. Department of Nursing Education, BW

Researcher(s): Shamian, Judith

IDRC Contribution: \$ 108560 CAD

Status: Active

3-P-89-1038

Health / Nutrition Impact on Plantation Workers' Families
(Dominican Republic)

Division: AFNS HS Programme: Health and the Community

In the Dominican Republic, the standard of living of the sugar cane workers employed on the state farms is abominable. This project will evaluate the impact on health and nutrition of an integrated rural development intervention organized and implemented by the nongovernmental organization (NGO), CEPROINSAE Bon Samariten. The study will investigate the social, medical, and environmental situation in selected bateys as reflected by the following indicators in the under-five population: infant mortality (death) rate; nutritional status; diarrhoeal disease; and respiratory tract infection. In addition, the knowledge, attitudes, behaviours, and practices (KABP) with regards to factors related to maternal and child health will be examined (e.g. accessibility of health care services; perceived health problems; access to food; prevention and control of infectious diseases). Also, the extent of community participation in local development and the factors influencing that involvement, will be assessed.

/sugar cane/ /plantations/ /rural development/ /community development/ /project evaluation/ /living conditions/ /health conditions/ /maternal and child health/ /attitudes/ /social surveys/ /social participation/
Area under study: /Dominican Republic/

Commitment Date: 1990-05-17 Est. Completion: 1993-05-17

Recipient(s): Université Laval, CA

Recipient(s): Centro de Promocion Integral y Salud
Educativa (CEPROINSAE Bon Samariten), DO
Researcher(s): Viens, Pierre
Researcher(s): Foblas, Joseph

IDRC Contribution: \$ 247270 CAD

Status: Active

3-P-90-0004

Nutrition in Urban Slums (India)

Division: HS SS FAD Programme: Health and the Community /
Urban Development / Training for Project Development / Centre
Wide Nutrition Unit

In India the influx of rural poor to urban slums in search of livelihoods is changing demographic, social, and economic profiles of the country. It is also creating a need for specifically targeted programs for the survival of the migrant population which becomes vulnerable to malnutrition in the process of transformation from the land-based to cash economy. This project will develop strategies and interventions for remedial action within the existing services, and suggest ways and means of how essential needs can be met with a modest increase in resources. The specific objectives are to identify key problems of the slums through participatory methods; study the nutrition and health behaviour of slum families; and develop intervention programs to improve their access to food, income, and utilization of health services provided by government and nongovernment agencies.

/migrants/ /human nutrition/ /basic needs/ /health
conditions/ /slums/ /urban areas/ /health services/ /social
services/ /social participation/ /questionnaires/
Area under study: /India/

Commitment Date: 1990-08-30 Est. Completion: 1993-07-31

Recipient(s): Shreemati Nathibai Damodar Thackersey Women's
University. Dept. of Postgraduate Studies and
Research in Home Science, IN
Researcher(s): Verghese, Mariamma

IDRC Contribution: \$ 317550 CAD

Co-funding Agencies:

UNICEF
Funding: \$ 98600 CAD

Child-In-Need Institute (CINI)

Status: Active

3-P-90-0031

Water Availability, Quality and Use in Rural Samana
(Colombia)

Division: HS Programme: Health and the Community

A high proportion of the population in Colombia (43%) still live in rural areas. When the availability of safe drinking water is very low, this situation is reflected in high morbidity (illness) and mortality (death) due to infections and parasitic diseases. When there is some kind of water system, the maintenance is poor, due, among other reasons, to the lack of community participation in the administration of the water systems. Even when the available water is of good quality, the habits of the population related to water use keep the risks of contamination at a high level. This project will describe the conditions of rural water sources in the Municipality of Samaná. The study will generate educational interventions and interinstitutional agreements for action programs to improve the sanitary conditions of the rural water system in the municipality. The community will have an active participation in the research process from the problem definition to the data analysis and implementation of results.

/drinking water/ /water supply/ /rural areas/ /water quality/
/evaluation/ /health education/ /participatory research/
Area under study: /Colombia/

Commitment Date: 1990-09-15 Est. Completion: 1991-09-15

Recipient(s): Foundation for Community Development in Samaná
(FUNDECOS), CO
Researcher(s): Morales, Margarita

IDRC Contribution: \$ 61279 CAD

Status: Active

3-P-90-0067

Female Work Profiles, Survival Strategies and Health of the Women (Ecuador)

Division: HS Programme: Health and the Community

Women in Ecuador are burdened by unhealthy living conditions; the status imposed upon them by a patriarchal society; and the condition of motherhood. This project will seek a better understanding of the health status of working women who are at a fertile age, under different employment conditions and in different regions of the country. The morbidity of the relevant groups will be studied through individual and group surveys with a special attention to nutritional problems, hearing ability, fatigue, and mental problems. Information will be collected from three target groups: textile workers in the metropolitan area; urban public sector white collar workers; and farming women in the rural areas. The research will be undertaken according to a participatory model with the aim of educating concerned women's groups.

/women workers/ /health conditions/ /morbidity/ /human nutrition/ /participatory research/
Area under study: /Ecuador/

Commitment Date: 1990-11-05 Est. Completion: 1992-11-05

Recipient(s): Centro de Estudios y Asesoría en Salud (CEAS),
EC

Researcher(s): Breilh, Jaime

IDRC Contribution: \$ 115869 CAD

Status: Active

3-P-90-0113

Sexual Attitudes and Behaviour of Adolescents (Dominican Republic)

Division: HS Programme: Health and the Community

To develop effective AIDS/STD (Acquired Immunodeficiency Syndrome/Sexually Transmitted Disease) prevention programs for adolescents in the Dominican Republic, accurate data on the sexual behaviour of this group is needed. While some studies have been carried out on this subject, their scope has generally been restricted to reproductive behaviour. This project will obtain in-depth information regarding the motivation and sexual decision-making process in adolescent sexuality. The project will have a qualitative core which focuses on what is called the "phenomenology of adolescent sexuality". The methodologies employed include focus groups and in-depth interviews. The results of these will be used in the development of a questionnaire, which will be validated by a series of in-depth interviews with a sample of 50 individuals possessing the same characteristics as the larger study sample. The questionnaire will then be used in further data collection. The knowledge gained pertaining to the social and cultural aspects of adolescent sexuality in the country will be useful in developing more effective sexual health programs, including those aimed at AIDS/STD prevention.

/adolescents/ /sexual behaviour/ /attitudes/ /decision making/ /cultural factors/ /social aspects/ /AIDS/ /sexually transmitted diseases/ /prophylaxis/ /disease control/ /health education/

Area under study: /Dominican Republic/

Commitment Date: 1990-10-10 Est. Completion: 1992-04-10

Recipient(s): Instituto de Sexualidad Humana, DO
Researcher(s): Garcia, Raphael

IDRC Contribution: \$ 67597 CAD

Status: Active

3-P-90-0131

HIV and Refugees (South Africa)

Division: HS Programme: Health and the Community / IDRC
Interdivisional AIDS Committee

Commitment Date: 1991-04-05 Est. Completion: 1993-04-05

Recipient(s): Health and Refugee Trust of South Africa, GB
Researcher(s): Zuma, Nkosoza

IDRC Contribution: \$ 221450 CAD

Co-funding Agencies:

Save the Children Fund
Oxfam
War on Want
Christian Aid
International Medical Aid

Status: Active

The proposal concerns a research, development and educational project to deal with the problem of Sexually Transmitted Diseases, HIV and AIDS among South African refugees. The collaborating institutions are the Regional Office of the Health and Refugee Trust (HEART) and the Health Department of the African National Congress. The project aims to establish the refugees information about, and attitudes towards STD's, HIV and AIDS, by using a combination of self-completed questionnaires, focussed group discussions, and workshops. These will provide a base on which to test existing educational materials about the disease, and to develop new educational processes and materials, which may include workshops, pamphlets, posters, role plays, community theatre etc. Because of the urgency of the situation, the project has been designed in such a way that all stages of the research, including the initial data-gathering phase, will have an educational component built in. The project will in the initial phase be targeted towards the refugee population residing outside of South Africa. Politically, the refugees are in a fluid situation, and it is not known how many will return in what period of time. This will not affect the course of the project, as it is expected that the training of AIDS organizers, the materials, and lessons learned from the educational campaign, will be applicable to the southern African situation in general, and can form a basis for joint work with the ANC internally in South Africa. The project will run over a period of two years. At that point it will be reviewed to assess if, and in what direction, it should continue.

3-P-90-0188

Study of Diarrhoea Among Children 0 to 4 years (Bénin)

Division: HS Programme: Health and the Community

Diarrhoea is the most important cause of infant mortality and one of the most frequent causes of infant hospitalization in Benin. To counter this, a national diarrhoeal disease control program was developed in 1985 with the assistance of UNICEF. This project will research the incidence of diarrhoea in children up to the age of 4 in an urban district of Cotonou. It will identify the risk factors that can be influenced by health education such as the parents' sociocultural beliefs; and attitudes and knowledge related to the prevention and treatment of diarrhoea. Specifically, the project will identify parents' awareness of dehydration and malnutrition symptoms, and of rehydration techniques; survey the conditions of individual hygiene related to diarrhoeal diseases; and assess the age and number of children in families, and the parents' level of education. A health education program will be formulated to reduce morbidity and mortality caused by diarrhoea.

/diarrhoeal diseases/ /infant mortality/ /prophylaxis/
/health education/ /risk/ /research capacity/
Area under study: /Benin/

Recipient(s): Centre national hospitalier universitaire
(CNHU), BJ
Researcher(s): Baba-Moussa, Amidou

IDRC Contribution: \$ 16163 CAD

Status: Active

3-P-90-0189

Features of Menopause in Selected Urban and Rural Areas of Cameroon**Division: HS Programme: Health and the Community**

Women between the ages of 40 and 65 years old (the age group of most menopausal women) constitute about 20% of the total population of Cameroon. The health problems of this relatively large group of women are often ignored by primary health care programs, which tend to focus more on reproductive women and children. Clinical and anecdotal evidence suggests, however, that many menopausal women suffer problems and conditions requiring both medical and psychosocial care. This project will focus on women of this age group and their menopausal experience. It will investigate the perceptual and behavioural aspects of menopausal problems requiring attention, especially nonmedical with a view to helping the women concerned to effectively deal with their experience. It will provide information that is currently lacking on the influence of sociodemographic, socioeconomic, and sociocultural factors (such as marital status, social class, religion, folk beliefs) on the health-seeking behaviour of menopausal women. Such information will be useful in further developing a sustainable and appropriate program of care for such women.

/women/ /aging/ /gynaecology/ /cultural factors/ /social aspects/ /health services/ /health planning/
Area under study: /Cameroon/

Recipient(s): Medical Research Institute (IMPM), CM
Researcher(s): Tantchou, Justine

IDRC Contribution: \$ 52682 CAD

Status: Active

3-P-90-0197

Social and Medical Determinants of Perinatal Mortality
(Nigeria)

Division: HS Programme: Health and the Community

Recipient(s): Obafemi Awolowo University. Department of
Obstetrics & Gynaecology, NG
Researcher(s): Okonofua, F.E.

IDRC Contribution: \$ 119325 CAD

Status: Active

Reports available from single institutions in Nigeria indicate a very high rate of perinatal mortality. These rates are however unrealistic because they do not take into account the fact that most deliveries occur outside approved government institutions. Also, the use of hospital data alone has not made it possible to determine the extent of involvement of social factors in the causation of perinatal mortality. This project will attempt to fill this gap in knowledge by investigating all deliveries including those that occur unsupervised at home and determine the role of various medical and social factors in perinatal mortality causation. Births and perinatal mortality will be studied prospectively for two years in health institutions within the Oranmiyan Local Government Area of Oyo State, Nigeria and in randomly selected households in different parts of the area. The data from institutions and households will be analysed and compared with another. These will be supplemented by community data obtained by questioning women about perinatal related events in the preceeding six years of their reproductive lives. An analysis of the data obtained should enable us to make a thorough assessment of factors predisposing to perinatal mortality in the area. The results will assist in the formulation of a program of action designed to reduce perinatal mortality in the health zone.

3-P-90-0204

Understanding High Risk Sexual Behaviour (Uganda)

Division: HS Programme: Health and the Community / SSD-AIDS
Committee

Recipient(s): Makerere University, UG
Researcher(s): Sewankambo, Nelson K.

IDRC Contribution: \$ 83445 CAD

Co-funding Agencies:

AIDS Control Program (ACP)

Status: Active

Results from an ongoing, longitudinal study in Rakai district of Uganda indicate that the HIV infection rate is highest in trading center areas (e.g. Lyantonde and Kyotera) along major routes. This qualitative, 18 month study, based in Lyantonde, aims at understanding sexual behaviour and its determinants among persons who are risk of HIV infection. Results from the study will be used to design and implement appropriate and culturally sensitive health education and counselling programs for the area.

This study, being qualitative in nature, will complement the IDRC supported quantitative study on sexual behaviour currently being carried out in Uganda. Results from the study will have a sample size of 60 persons. The sample group is small because of the large amount of qualitative data that will be collected and analyzed. The sample will include long distance truckers, bar girls, HIV positive individuals and persons who frequently contract sexually transmitted diseases, adolescents and young adults. Data will be obtained using a variety of ethnographic methods including in-depth interviews, key informants interviews, structured questionnaires and focus group discussions. Structured questionnaires will be administered not only to the study sample but to the sub groups previously mentioned and the general population in and around Lyantonde. Bar girls will be involved in the development and implementation of the project. It is hoped that the participatory research approach will maximize the cooperation of participants and will produce both a more effective and relevant set of interventions for the prevention and management of HIV infections.

3-P-90-0219

Iodine Deficiency Disorders (Ghana)

Division: HS Programme: Health and the Community /
Nutrition Unit

It is estimated that close to a billion people globally are at risk of iodine deficiency disorders (IDD). Besides goitre, IDD may result in cretinism; increased rates of perinatal and infant mortality; and intellectual and neurological impairment. While it is suspected that IDD is endemic in many areas of Ghana there is no reliable information on which to base a national program for the prevention and control of IDD. This project will determine the prevalence of goitre in the three broad soil zones of the country; conduct a market survey to identify the sources and distribution of salt; determine the socio-cultural factors influencing IDD and salt consumption; and organize workshops to inform key groups about the IDD situation in Ghana. The findings of this study will stimulate the formation of a National Committee for the Control of IDD; generate recommendations for appropriate interventions; and lay the base for monitoring progress once interventions are instituted. Discussions are already underway between government of Ghana officials and donor agencies for support for the next phase: a national program for the control of IDD.

/endocrine system/ /deficiency diseases/ /endemic diseases/
/epidemiology/ /diet/ /salt/ /market studies/ /social
surveys/ /prophylaxis/ /disease control/
Area under study: /Ghana/

Commitment Date: 1991-03-08 Est. Completion: 1993-03-08

Recipient(s): University of Ghana. Department of Nutrition
and Food Science, GH
Researcher(s): Asibey-Berko, E.

IDRC Contribution: \$ 324557 CAD

Status: Active

3-P-90-0225

Mental Health (Peru)

Division: HS Programme: Health and the Community

Commitment Date: 1991-03-14 Est. Completion: 1993-03-14

Recipient(s): Universidad Peruana Cayetano Heredia, PE
Researcher(s): Perales, Alberto

IDRC Contribution: \$ 99260 CAD

Status: Active

The proposed research will collect information regarding the way in which communities identify and manage mental health problems. It will relate community perception and management of these mental health problems to social and cultural contextual variables. The data will be collected using qualitative methodologies in a convenience sample of cases selected from eleven categories of psychopathological behavior.

The research results will be used to aid in the development of socially and culturally sensitive mental health services. This goal will be achieved through sensitizing local health practitioners and by enhancing community participation in the management of mental health problems.

The project will further the Center's development goals by promoting equitable access to appropriate health services, especially for underserved poor and rural populations. The aims of the Division and the Program are also reflected in the multidisciplinary and cross-cultural nature of the research, as these investigators' findings will be compiled and compared with those of a homologous study in Bahia, Brazil and a similar research initiative in Madras, India.

3-P-90-0226

Mental Health (Brazil)

Division: HS Programme: Health and the Community

Commitment Date: 1991-03-25 Est. Completion: 1993-03-25

Recipient(s): Universidade Federal da Bahia, BR
Researcher(s): Almeida-Filho, Naomar

IDRC Contribution: \$ 194550 CAD

Status: Active

The proposed research will collect information regarding the way in which communities identify and manage mental health problems. It will relate community perception and management of these mental health problems to social and cultural contextual variables. The data will be collected using qualitative methodologies in a convenience sample of cases selected from eleven categories of psychopathological behaviour.

The research results will be used to aid in the development of socially and culturally sensitive mental health services. This goal will be achieved through sensitizing local health practitioners and by enhancing community participation in the management of mental health problems.

The project will further the Centre's development goals by promoting equitable access to appropriate health services, especially for underserved poor and rural populations. The aims of the Division and the Program are also reflected in the multidisciplinary and cross-cultural nature of the research, as these investigators' findings will be compiled and compared with those of a homologous study in Lima, Peru and a similar research initiative in Madras, India.

3-P-90-0235

Infant Mortality in South Kanara (India)

Division: HS Programme: Health and Community

Infant mortality rate (IMR) is generally taken as a reliable and sensitive index of the total health conditions of a community. The government of India in its national health policy has clearly emphasized the urgency to bring down IMR from the current level of 96 per 1000 live births to less than 60 per 1000 live births by the year 2000.

Population-based studies have been very few, and there is an urgent need to accurately assess infant mortality and the factors influencing it in different parts of the country. This study will be undertaken in South Kanara district of Karnataka where IMR is presumably low. For comparison, the study will be extended to another district of Karnataka, Dharwad district, where IMR has been reported to be high. The study will not only establish causes of infant deaths in these two districts but also various demographic, socioeconomic, and cultural factors influencing infant mortality. Further, the influence of availability and range of health facilities and their utilization will also be studied. Findings will be disseminated.

/infant mortality/ /comparative analysis/ /data collecting/
/data analysis/ /health services/
Area under study: /India/

Recipient(s): Kasturba Medical College, IN
Researcher(s): Chakladar, B.K.

IDRC Contribution: \$ 64580 CAD

Status: Active

3-P-90-0261

AIDS Counselling and Education

Division: HS Programme: Health and the Community

In the absence of a vaccine and of therapeutical means there is, for the time being, only one weapon against the fast spreading of VIH infection and of AIDS cases: prophylaxis. In this context, counselling and health education are of great importance in developing countries such as Senegal, where health education is absent both in the school system and in the family, and multiple sex partners are the rule. This project will promote, among social workers, research and training in health education and counselling on AIDS. Specifically, 10 case studies on counselling and health education will be produced along with modules and practical guides for trainers and counsellors; discussions will be conducted on the potential and actual role of the participating social workers in this program; and audiovisual materials, mainly videos, will be produced.

/teacher training/ /health education/ /AIDS/ /training
courses/ /social workers/ /prophylaxis/
Area under study: /Senegal/

Recipient(s): Association nationale des assistants sociaux et
aides spécialisées (ANASAS), SN
Researcher(s): Diouf, Dally

IDRC Contribution: \$ 65184 CAD

Status: Active

3-P-90-0266

Knowledge for Development: Adolescent Health, Sexuality and Pregnancy

Division: HS SS Programme: Health and the Community / Population, Education and Society

The utilization of knowledge for the appropriate design of programs and policies on adolescent sexuality and pregnancy is the major goal of this project. The project will help institutions and social promoters' groups in Chile to use available knowledge for policy and program design, implementation, and evaluation purposes. Researchers will carry out specific studies to fill information gaps in the areas of adolescent sexuality and pregnancy; adolescent reproductive behaviour; health care services for adolescents; and opinions of government authorities, political leaders, professional organization, and community-based movements. Researchers will also implement an information system for the gathering of available knowledge and its dissemination among government organizations, NGOs, and academic institutions; formulate and implement a training strategy for health and social participation in programs; and draw up proposals for public policies and programs related to adolescent pregnancy prevention, pregnancy care, and the follow-up of adolescent mothers.

/adolescents/ /sexuality/ /pregnancy/ /health services/
/maternal and child health/ /health education/ /health
policy/ /policy making/ /data collecting/ /information
systems/

Area under study: /Chile/

Commitment Date: 1991-02-26 Est. Completion: 1993-02-26

Recipient(s): Corporación de Salud y Políticas Sociales
(CORSAPS), CL

Researcher(s): Marshall, Teresa

IDRC Contribution: \$ 241500 CAD

Status: Active

3-P-90-0303

Female Circumcision (Kenya)

Division: HS (Health + Community) - ROF EARO

The lack of accurate and current data on the incidence of female circumcision in Kenya societies, and the factors associated with it, is a major obstacle to the formulation of policy. Although medical and ethnographic literature forms a major part of the available resources, this literature does not provide adequate data for initiating effective action. Consequently, it is imperative that indigenous research efforts should be initiated and encouraged as is the case with this proposed study, to focus on female circumcision with the objective of informing the people concerned with the practice project about its effects on the women and children. This will make possible the interpretation of data on the basis of concepts and ideologies of the affected societies, as well as generate useful information for policy.

/traditional medicine/ /surgery/ /women/ /cultural factors/
/social research/ /data collecting/ /information
dissemination/

Area under study: /Kenya/

Commitment Date: 1991-04-23 Est. Completion: 1992-04-23

Recipient(s): Moi University. Department of Anthropology, KE
Researcher(s): Gwako, Laban Moogi

IDRC Contribution: \$ 14287 CAD

Status: Active

3-P-90-0322

Amazonic Leishmaniasis in the Peruvian Andes (Peru)

Division: HS Programme: Health and the Community

Commitment Date: 1991-04-12 Est. Completion: 1994-04-12

Recipient(s): Centro de Investigación y Promoción Amazonica
(CIPA), PE

Researcher(s): Calmet Bohme, Jaime

IDRC Contribution: \$ 246851 CAD

Co-funding Agencies:

37260

Status: Active

Amazonic or mucocutaneous leishmaniasis is a chronic, debilitating disease with high social and economic costs. Its prevalence in the Southeastern Andean region of Peru has dramatically increased in recent years, and it is now recognized as a major public health problem. Its existence in the Andes is thought to be due almost entirely to the temporary migration of young men to the Amazon jungle for gold extraction; thus, an understanding of the causes and nature of this migration is essential to understand and improve the control of this disease. This proposal seeks to identify and explain the mechanisms through which temporary migration, the ecology and economic conditions of the sending region (Ocongate District, Cusco Region, Peru) and the conditions in the gold mining areas in the jungle interact to determine the epidemiology of Amazonic leishmaniasis in the Ocongate District.

The second part of this proposal is an analysis of the local response to this disease, which has culminated in the formation of a self-help group, AELO. This will be an operational research done jointly by the research team and the community, with the goals of evaluating its work to date, improving its potential, evaluating it as a possible model for decentralized health care in the region, and encouraging the participation of the community in the analysis and control of its health problems.

This proposal represents a unique attempt to systematically articulate social data (migration), the natural history of a disease, and community-based control strategies, using a carefully designed methodology incorporating quantitative and qualitative instruments and community participation at all stages.

3-P-90-0328

Socio-cultural Determinants of AIDS (Zimbabwe)

Division: HS SS Programme: Health and the Community / IDRC
Interdivisional AIDS Committee

Recipient(s): University of Zimbabwe. Department of Sociology
, ZW

Researcher(s): Mhloyi, Marvellous

IDRC Contribution: \$ 118670 CAD

Status: Active

This project seeks to explore and evaluate the effectiveness of alternative strategies for AIDS education and counselling. Five communities will be targeted for five different educational intervention strategies using combinations of traditional communication networks (chiefs, schools, churches, folk dance, and women's clubs), education by village health workers, and dramatization & discussion. The intervention strategy using "dramatization & discussion" is founded upon the use of theater to inform audiences about AIDS. Community perception of acceptability and effectiveness of the educational strategies in the five experimental groups will be assessed and compared through qualitative analysis of focus group discussions. Themes for the educational message will be selected based on information obtained in the baseline studies of KABP and in interviews with HIV-infected persons and PWA's.

The proposed research furthers the objectives of the Centre and the Health and Community Program through its innovative and action-oriented approach, the recognition of the importance of social and cultural factors in the design of educational interventions, and the emphasis on the participation and empowerment of AIDS victims. It complements other IDRC-funded research on human sexual behavior and AIDS, and reflects global strategies to address the epidemic. In addition to providing useful knowledge to identify solutions to a public health problem of great relevance in Zimbabwe, the proposed research will contribute to strengthening the capacity for such research in that country.

3-P-90-0331

West and Central Africa AIDS Research Network

Division: HS Programme: Health and the Community

Recipient(s): Africa AIDS Research Network Secretariat, SN
Researcher(s): Mboup, Souleymane

IDRC Contribution: \$ 160800 CAD

Co-funding Agencies:

WHO

Funding: \$ 182121 CAD

Ford Foundation

Funding: \$ 179800 CAD

Status: Active

In many African countries today, AIDS has become a major public health problem of almost unmanageable proportions clinically. It is now widely acknowledged as constituting a significant component of Africa's socio-economic crisis. The number of reported cases is known to double every year. In some urban areas, close to 50% of all hospital deaths now are attributed to AIDS. It has become quite clear that health education based on adequate information and effective as well as appropriate communications strategies targetted at promoting sexual health remains one of the most viable ways of containing the spread of the AIDS virus in Africa. But this requires research, especially applied research of a multi-disciplinary nature and the sharing of research information and country experiences in AIDS control. The AIDS Research Network of West and Central Africa was formed in 1989 in response to this need to encourage multidisciplinary AIDS research and its application to AIDS control by facilitating collaboration among researchers in the region. The funds requested for this project will enable the Network to initiate a small grants program and to organise a number of methodology and research-related workshops over a 2-year period.

3-P-90-0349

Understanding High Risk Sexual Behaviour (Kenya)

Division: HS Programme: Health and the Community

Recipient(s): University of Nairobi. Department of Psychology
, KE

Researcher(s): Balmer, Don

IDRC Contribution: \$ 50546 CAD

Status: Active

Sustaining an epidemic infections transmitted sexually requires subsets of the populations, comprised of individuals who have many sex partners over short periods of time. If these individuals do not adopt safer sexual behaviours the epidemic cannot be controlled. Very little is understood about the root causes of this pattern of behaviour and how this behaviour changes over time. Even less is known about how behavioral interventions affect this type of behaviour. Counselling has been increasingly adopted as a strategy in the control of STD/HIV. Counselling may well be a very effective intervention for this purpose but is expensive, and labour intensive of highly trained individuals. Further there is no evidence that counselling will reach the "hard to reach" highly sexually active individuals who sustain the epidemic. Embarking on counselling on a massive scale on the basis of anecdotal conclusions as to the necessity and effectiveness of counselling seems imprudent. While it is improbable that counselling can be used on a scale sufficient to replace other less labour intensive approaches, it may have a very important role in interventions targeted at core groups or other population sub groups. The overall goals of this project are to develop a more detailed understanding of the sexual behaviour that results in STD/HIV acquisition and transmission and to evaluate group counselling as an intervention strategy in a group of individuals with a demonstrated high risk of STD/HIV acquisition.

IDRIS.IDRIS

3-P-90-0355

HIV and the Labour Movement (South Africa)

Division: HS Programme: Health and the Community

Commitment Date: 1991-06-14 Est. Completion: 1993-06-14

Recipient(s): Workplace Information Group, ZA
Researcher(s): Seripe, Bafana

IDRC Contribution: \$ 74759 CAD

Status: Active

The aim of the project is to develop means for preventing the spread of HIV within the organized labour movement in South Africa. More specifically, the project will seek to stimulate discussions and actions amongst long distance truck drivers who are members of the Transport and General Workers Unions that may result in modifications of sexual behaviour that put such workers at risk to HIV. The outcome of the project may be of some usefulness to others in the region seeking to prevent the spread of HIV through the labour movement.

HEALTH SYSTEMS PROGRAM

3-P-87-0037

Health Management of the Urban Poor in Four Asian Cities
(Asia)

Division: HS Programme: Health Systems Research / Health
Systems

The increasing pace and magnitude of urbanization and the growing number of slum and squatters in South East Asia have compelled national and municipal health authorities to place a heightened emphasis on the plight of the urban poor. Key questions facing policymakers are how policies and programs can be developed to effectively meet the health needs of the urban poor and what role community participation can play in this process. This project will evaluate health needs and services in four major cities with the aim of developing an appropriate model for providing health services to low income communities. The resultant regional network of health investigators will provide a forum for comparative cross-country analyses of health care delivery issues and for the development and dissemination of strategies for the improvement of these services.

/primary health care/ /low income/ /urban areas/ /health
policy/ /health planning/ /project evaluation/
Area under study: /South East Asia/

Commitment Date: 1987-07-29 Est. Completion: 1989-07-29

Recipient(s): Institute of Southeast Asian Studies (ISEAS),
SG
Researcher(s): Osteria, Trinidad S.

IDRC Contribution: \$ 230250 CAD

Status: Closed

3-P-87-0080

Community Participation in Health Development (Ghana)

Division: HS Programme: Health Systems Research / Health Systems

The government of Ghana has wholeheartedly accepted, and tried to implement, the model of primary health care. Ghana has a tradition of community self-help, so community participation in health development should, theoretically, easily take root. Yet there are indications that this is not happening. This project will study the dynamics of community participation at the village level. Factors to be examined will include power structures, decision-making, level of village organization, the health delivery system and how these relate to community involvement.

/primary health care/ /community development/ /social participation/ /self-help/
Area under study: /Ghana/

Commitment Date: 1987-09-01 Est. Completion: 1988-12-31

Recipient(s): University of Ghana. Department of Community Health, GH
Researcher(s): Pappoe, Matilda E.

IDRC Contribution: \$ 15183 CAD

Status: Active

3-P-87-0171

Organization and Management in Primary Health Care (Zambia)

Division: HS Programme: Health Systems Research / Health Systems

In 1978, Zambia initiated a new health policy which focused on primary health care (PHC). One of the essential characteristics of this approach is its community-based focus. PHC practitioners are expected to work together with professionals from other sectors and from the community with little or no training in team work or its management. Consequently, there is a concern that inadequate preparation has resulted in a PHC system characterized by poor cooperation, weak coordination and ineffective communication. This study will examine the nature and degree to which PHC practitioners are expected to work together in Zambia, focusing on both policy and management issues at the national provincial and district levels. A primary concern will be to identify those conditions which foster cooperation, so that they can be built upon to improve management in PHC.

/primary health care/ /health personnel/ /team work/ /work organization/ /personnel management/
Area under study: /Zambia/

Commitment Date: 1987-12-28 Est. Completion: 1988-12-28

Recipient(s): University of Zambia, ZM
Researcher(s): Chibuye, Peggy

IDRC Contribution: \$ 16750 CAD

Status: Closed

3-P-87-0172

Evaluation of PK Nurses (Indonesia)

Division: HS Programme: Health Systems Research / Health Systems

The Primary Health Nurse/Perawat Kesehatan (PK) program in Indonesia was initiated in 1975 by the Centre for Education and Training of the Ministry of Health to help meet the health needs of the population, particularly those in the remote rural communities. In this program, a graduate from junior high school (9 years of general education) undergoes a 3-year basic nursing education program in PK school recognized by the Government. The PK graduate is a general nurse practitioner expected to provide basic nursing services including health promotive, preventive, curative and rehabilitative services. As of 1985, there were approximately 15,000 PK graduates, of which around 10,000 were in active service throughout the country. The objective of the PK graduates, with particular reference to their functions as defined by the standards of the PK program are the quality of service delivered; job satisfaction; and factors which may affect the delivery of their program. The project will take place in 10 provinces of Indonesia.

/nurses/ /primary health care/ /programme evaluation/
Area under study: /Indonesia/

Commitment Date: 1988-10-19 Est. Completion: 1990-10-19

Recipient(s): Indonesia. Ministry of Health, ID
Researcher(s): Soenardi, J.

IDRC Contribution: \$ 213170 CAD

Status: Active

3-P-87-0231

Ethno-Medicine and Health Care (Kenya)

Division: HS SS Programme: Health Systems Research / Health Systems / Population and Development Research

Kenya has adopted the concept of primary health care (PHC) as the best approach to deliver health services to the majority of its population. However, health service coverage in rural areas remains very low, so most rural Kenyans look to traditional practitioners for health care. Collaboration between the professional and traditional health sectors has been advocated by health authorities, but remains at a rather elementary level. This project will develop policy recommendations on the role of traditional health practitioners in health care delivery in rural areas, which could be used in the planning and implementation of improved PHC strategies. Researchers will study the accessibility and availability of modern and traditional health services; therapy-seeking and therapy-selecting behaviour; and organizational aspects of traditional medical practice and implications for PHC delivery.

/primary health care/ /health planning/ /rural areas/
/traditional medicine/
Area under study: /Kenya/

Commitment Date: 1989-02-26 Est. Completion: 1991-02-26

Recipient(s): Moi University, KE
Researcher(s): Sindiga, Isaac

IDRC Contribution: \$ 76740 CAD

Status: Active

3-P-87-0238

Evaluation of Health Services in a Refugee-Affected Area
(Sudan)

Division: HS Programme: Health Systems Research

The influx of refugees into the Sudan from Chad, Uganda and particularly from Ethiopia has placed an extraordinary strain on the ability of the government of Sudan to provide essential health and social services to both the indigenous and refugee populations. This project will comparatively analyze the health care delivery system in a refugee-affected area of the Eastern Region which has not experienced an influx of refugees. Information will be collected on the development of health services and policy in this region; on how the refugee influx has affected the performance of the health care delivery system; and on the capacity of the existing system to meet the needs of both the indigenous Sudanese and the refugee populations.

/health services/ /health policy/ /refugees/
Area under study: /Sudan/

Commitment Date: 1989-02-04 Est. Completion: 1990-04-04

Recipient(s): Office of the Commissioner for Refugees, SD
Researcher(s): Michael, Nabil Aziz
Researcher(s): El Tom, Abdel R.

IDRC Contribution: \$ 179595 CAD

Status: Active

IDRIS.IDRIS

3-P-87-0239

Active Surveillance of T.B. in Remote Communities (Mexico)

Division: HS Programme: Health Systems Research

Tuberculosis is widely spread in rural communities in Mexico. However, there is no reliable data to quantify the extent of the problem. This project will investigate different forms of tuberculosis surveillance in remote communities and compare the current system (passive surveillance in peripheral clinics) to an active system, using trained community workers and portable handheld microscopes. Personnel at forty rural clinics will be trained in light microscopy. Researchers will also examine the cost implications for wider application.

/tuberculosis/ /diagnosis/ /evaluation/ /paramedical
personnel/ /training/

Area under study: /Mexico/

Commitment Date: 1988-04-13 Est. Completion: 1990-04-13

Recipient(s): Universidad Autonoma de Guerrero, MX

Researcher(s): Martinez, Eduardo

Researcher(s): Andersson, Neil

IDRC Contribution: \$ 33790 CAD

Status: Active

3-P-87-0245

Evaluation of Administration / Management of Health Services
(Egypt) - Phase I

Division: HS Programme: Health Systems Research

One of the most important constraints to the effective and efficient functioning of health care systems is a deficiency in service management and administration. This is particularly true about the capacity of responsible organizations to collect, on a timely basis, valid and comprehensive information on the operation and performance of health services and their effect on the health of the targeted population. As well, there is limited ability to use such data in program planning and policy formulation processes. The Palestine Red Crescent Society, which is responsible for planning, implementing, managing and evaluating health and health-related social services for Palestinian refugees from the occupied territories in host Arab countries, sees this as a major constraint to its own operation. This project will evaluate the administrative and management within the PRCS, particularly as they apply to decision-making in the program and policy planning and formulation capabilities of the PRCS, for the benefit of the Palestinians who rely on its health and health-related social services.

/health administration/ /evaluation/ /Palestinians/ /health
planning/ /decision making/
Area under study: /Egypt/

Commitment Date: 1988-03-28 Est. Completion: 1989-06-28

Recipient(s): Palestine Red Crescent Society, EG
Researcher(s): Hashish, Mohamed Abou

IDRC Contribution: \$ 232210 CAD

Status: Closed

3-P-87-0250

Immunization Coverage (Thailand)

Division: HS Programme: Tropical and Infectious Diseases /
Health Systems

The Expanded Program on Immunization (EPI) is a global effort sponsored by WHO and UNICEF to combat child death and disease and to immunize every child in the world by 1990 against the six diseases of childhood (diphtheria, pertusses, tetanus, poliomyelitis, measles and TB). The Ministry of Health in Thailand launched its national EPI program in 1977. However, despite the establishment of guidelines for the implementation of the program and achievement targets, an initial evaluation of the program shows the incidence of some diseases is increasing. The Faculty of Medicine at Khon Kaen University, together with personnel from the Ministry of Health (northeastern province), will carry out a research study to assess the EPI program, using DPT and OPV as indicators. They will also identify factors limiting the impact of the program.

/immunization/ /programme evaluation/ /questionnaires/
Area under study: /Thailand/

Commitment Date: 1988-04-29 Est. Completion: 1989-10-29

Recipient(s): Khon Kaen University. Department of Pediatrics,
TH
Researcher(s): Sompon Tassniyom

IDRC Contribution: \$ 56210 CAD

Status: Closed

3-P-87-0260

Acute Respiratory Infections (China)

Division: HS Programme: Tropical and Infectious Diseases /
Health Systems

Presently, acute respiratory infection is the leading cause of death among children in many countries, including China. This project will develop, implement, and evaluate a comprehensive child health package that incorporates upgrading the skills of health workers in pneumonia detection and management and health education for the mothers. The aim is to reduce the morbidity and mortality from lower respiratory infection (LRI). Three townships in the Jianxin district will represent the experimental areas and other townships will be chosen as controls. At the end of one year, the changes in knowledge and practice of health workers and mothers will be assessed. The level of worker management will be assessed by the supervisors. The disease trend will also be analyzed. Finally, the package and the manuals for the prevention of LRI will be evaluated and disseminated for widescale use.

/respiratory diseases/ /pneumonia/ /disease control/
/children/ /health education/ /primary health care/
Area under study: /China/

Commitment Date: 1988-08-16 Est. Completion: 1991-08-16

Recipient(s): Capital Institute of Paediatrics, CN
Researcher(s): Dai Yaohua

IDRC Contribution: \$ 135540 CAD

Status: Active

3-P-87-0264

Containers for Primary Health Care (PATH) - Phase II

Division: HS Programme: Health Systems Research / Health Systems

The availability of appropriate primary health care (PHC) technologies is key to the delivery of essential health services in developing countries. One technology for which a need has been repeatedly expressed is a container system for medical equipment and supplies which is light, durable, portable and inexpensive. In phase I of this project a prototype portable health care container system (PATHpaktm) was developed and subjected to field testing in Kenya. Based on the initial field trials, modification to the prototype were recommended. This second phase will complete the development of an appropriate portable container system to be used for the transport of medical supplies and equipment by primary health care workers. Project participants will complete design and tooling modifications and manufacture 1,000 Mark I PATHpaktm cases; perform field trials of the Mark I case in four countries in different regions; and prepare initial instructional materials for users.

/containers/ /primary health care/ /appropriate technology/
/product development/ /product design/ /testing/
Area under study: /Global/

Commitment Date: 1988-04-15 Est. Completion: 1991-02-28

Recipient(s): Program for Appropriate Technology in Health
(PATH), US
Researcher(s): Free, Michael J.

IDRC Contribution: \$ 350342 CAD

Status: Active

IDRIS.IDRIS

3-P-87-0269

Small Grants Program on Health Services Research in Africa

Division: HS FAD Programme: Health Systems Research

As more countries begin using primary health care to achieve "Health for All by the Year 2000," new priorities in health systems and manpower development will emerge. The African Advisory Committee on Health Research of the WHO African Region has identified research in support of primary health care as the health research priority. Capabilities to conduct research as well as to link research findings to decision-making are inadequate in the African region. This project will support about ten small operational research studies dealing with primary health care and run two workshops and a seminar on research methods and dissemination of research findings.

/research fellowships/ /primary health care/ /research methods/ /training courses/
Area under study: /Africa/

Commitment Date: 1989-03-20 Est. Completion: 1990-05-31

Recipient(s): WHO. Regional Office for Africa, CG
Researcher(s): Wurapa, Fred

IDRC Contribution: \$ 328580 CAD

Status: Active

3-P-88-0062

Evaluation of a Pre-School Feeding Program (Kenya)

Division: HS Programme: Health Systems / Health and the
Community / Maternal and Child Health / Health Services
Research

Nationwide nutrition surveys carried out in Kenya between 1977 and 1982 revealed that nearly one-third of children five years old and younger are stunted in growth. By December 1986, there were 12,192 pre-school centres in the country with a total enrolment of over 650,000 children. About one-quarter of these are three to six years of age. The Kenya Institute of Education, which is responsible for the training of pre-school teachers and the development of the pre-school curriculum, encourages child centre administrators to institute feeding programs to "assist in meeting the nutritional needs of the children and to educate parents in health and nutrition matters." However, recent information indicates the feeding programs are not having the expected impact. The objective of this project is to identify and evaluate current practices in pre-school child centres with respect to health and nutrition activities with a view to develop policy guidelines for improving the operations of the centres.

/child care/ /human nutrition/ /diet/ /nursery schools/
/programme evaluation/
Area under study: /Kenya/

Commitment Date: 1988-10-04 Est. Completion: 1990-04-04

Recipient(s): Kenyatta University. Department of Home
Economics, KE
Researcher(s): Oniang'o, Ruth

IDRC Contribution: \$ 39000 CAD

Status: Active

3-P-88-0125

Operational Assessment of National Tuberculosis Control Programme (PH)

Division: HS Programme: Health Systems Research

Tuberculosis remains a major health problem in the Philippines. It has been estimated that only 20% of new cases are found and placed in therapy and of these 59% drop out of treatment within one year, often inappropriately. It is felt that the national control program could benefit from an in-depth review. An operational assessment of the case-finding and treatment aspects of the strengthened National Tuberculosis Control Programme will be conducted in Mindoro Oriental to identify obstacles encountered by different categories of health workers and non-governmental agencies. An assessment team will visit all health institutions existing in seven municipalities selected at random. Activities to be undertaken include the examination of existing records to establish the current situation; interview of different categories of health personnel, patients, and a selected number of community members; and observation of on-going activities, specifically the consultation procedures. Findings for each health institution will be discussed with all health personnel concerned in a series of post-study seminars.

/tuberculosis/ /disease control/ /programme evaluation/
Area under study: /Philippines/

Commitment Date: 1988-12-15 Est. Completion: 1990-01-15

Recipient(s): Philippine Tuberculosis Society Inc., PH
Researcher(s): Sarmiento, Amelia G.

IDRC Contribution: \$ 149270 CAD

Status: Active

Division: HS Programme: Health Systems Research

```

/health planning/ /information systems/ /decentralization/
/health surveys/ /models/ /health administration/
Area under study: /Kenya/

```

Commitment Date: 1989-04-12 Est. Completion: 1992-04-12

Recipient(s): African Medical and Research Foundation (AMREF)
 , KE
 Researcher(s): Kisubi, Wilson

IDRC Contribution: \$ 360105 CAD

Status: Active

3-P-88-0266

Community Participation in Dental Health (Philippines)

Division: HS Programme: Health Systems Research

The College of Public Health at the University of the Philippines will carry out a research project to test a mode to promote self-reliance by poor urban communities to meet their dental health care needs through community participation. Dental auxiliaries will be trained to deliver preventive, promotive, and emergency dental services while the barangay health worker will be trained in dental health education. The communities will develop their own managerial model. The study will be carried out in three communities, two of which will have variations of this program. The third will act as a control with the existing dental health care program. Evaluation of the project will focus on the performance and behaviour of the community, and the dental auxiliaries in relation to their dental health care. An improved dental health status among the main age group of concern, children aged 2-14 years, is expected to result in a decrease in dental caries incidence, an improvement in oral hygiene, and a possible change in knowledge, attitudes, and practices on dental health.

/dental diseases/ /health conditions/ /dentistry/ /health services/ /social participation/ /vocational training/ /evaluation/

Area under study: /Philippines/

Commitment Date: 1989-06-02 Est. Completion: 1992-06-02

Recipient(s): University of the Philippines, PH
Researcher(s): Parajas, Irma L.

IDRC Contribution: \$ 96760 CAD

Status: Active

3-P-88-0295

Improving Family Welfare Services (India)

Division: HS SS Programme: Health Services Research /
Population, Education and Society

The key organizational unit for delivery of primary health care services in India is the Primary Health Centre (PHC). Among other responsibilities, the PHCs play a key role in delivery of the "Family Welfare Programme" (i.e. family planning services). In this as in other areas, the PHCs are underutilized and regularly fail to meet their objectives. One reason identified for this failure is the inadequate planning systems at the PHC level. The objective of this project is to design and test such a planning system using full participation of the PHC doctors and other personnel, and taking into account local conditions and needs.

/primary health care/ /health planning/ /family planning
programmes/

Area under study: /India/

Commitment Date: 1990-01-31 Est. Completion: 1992-06-30

Recipient(s): Indian Institute of Management, IN
Researcher(s): Giridhar, G.

IDRC Contribution: \$ 50200 CAD

Status: Active

3-P-88-0308

Sentinel Site Surveillance to Measure Health Impact (Mexico)

Division: HS Programme: Health Systems Research

This project will use sentinel sites to collect reliable health information at the community level throughout the state of Guerrero, Mexico. These sites, taken together, reflect the diversity and spread of health conditions in the state. Changes in health status over time will be measured in relation to health care interventions, using house-to-house surveys carried out at roughly three-month intervals. State health authorities will participate, and it is anticipated that the official health apparatus will assimilate the methodology and that this project will contribute towards the orderly decentralization of the Mexican health service.

/health conditions/ /health surveys/ /methodology/ /health services/ /evaluation/ /health planning/ /decentralization/
Area under study: /Mexico/

Commitment Date: 1989-04-12 Est. Completion: 1992-04-12

Recipient(s): Universidad Autonoma de Guerrero, MX
Researcher(s): Andersson, Neil

IDRC Contribution: \$ 203813 CAD

Status: Active

IDRIS.IDRIS

3-P-88-0310

Design of a Cost and Management Model for Hospitals (Colombia) - Phase I

Division: HS Programme: Health Systems Research

Since 1968, the crisis situation in Colombia's public hospitals has continued and worsened, and this has affected the provision of health services and the state of labour relations in the sector. Numerous studies have pointed to unsatisfactory management as a major factor. This project will support an exploratory pilot study to compile and analyze existing information on Colombian hospitals, and propose a model for an integrated management system for third level hospitals in the country. The management control system will be supported by a unified information system, as well as by a cost system. The design will be developed at the Erasmo Meoz de Cucuta hospital.

```

/hospital management/ /hospitals/ /financial administration/
/health services/ /information systems/ /models/
Area under study: /Colombia/

```

Commitment Date: 1989-03-31 Est. Completion: 1989-09-30

Recipient(s): Fundacion la Previsora para la Seguridad Social
CO

Researcher(s): Yepes, Francisco J.

IDRC Contribution: \$ 71950 CAD

Status: Closed

3-P-88-0321

Community Participation in Health Promotion at the District Level (Egypt)**Division: HS Programme: Health Systems Research**

While community participation has been universally acknowledged since the declaration of Alma Ata (1978) as indispensable to the primary health care approach, active involvement of communities has remained tenuous. Researchers in the Faculty of Medicine, Suez Canal University, have responded to an initiative taken by an Egyptian rural community and will participate in the development of a community health plan. This project will support the first 18-month phase of community-based research wherein the community will identify its health concerns and set priorities. The University will collaborate by supporting community involvement; by developing a methodology to study the process of community participation; and by providing a certain level of health services in association with the District Health Service. In future, further funds will be requested for a phase II for the implementation of the community health plan followed by a Phase III for the evaluation of the impact of the plan in the community.

/health planning/ /primary health care/ /social participation/ /community development/
Area under study: /Egypt/

Recipient(s): Suez Canal University, EG
Researcher(s): Ezzat, Essmat

IDRC Contribution: \$ 246922 CAD

Status: Active

3-P-88-0353

Mental Health Care in U.P. (India)

Division: HS Programme: Health Systems Research

Illness due to mental disorders in India is comparable to any other part of the world. One estimate suggests that perhaps ten million Indians suffer from severe mental disorders, with two to three times that number affected with neurotic or psychosomatic conditions. While the majority of the population inhabit rural areas, the available mental health care facilities are concentrated in urban centres and are inadequate. One strategy for overcoming this would be to integrate psychiatric services into existing primary health care facilities. However, models of such mental health care delivery have been unrealistic in terms of their usefulness, possibly because the target communities have not been consulted. This project to be undertaken in a rural area will find out the pattern and usefulness of mental health care available; determine alternative patterns of mental care as perceived by the community; and document the community expectations of mental health care. Information collected will be used to develop a model of mental health care delivery which could then be tested in a subsequent project.

/mental health/ /primary health care/ /rural areas/ /health planning/ /models/
Area under study: /India/

Commitment Date: 1989-06-06 Est. Completion: 1990-06-06

Recipient(s): Sanjay Gandhi Post-Graduate Institute of
Medical Sciences, IN
Researcher(s): Sethi, B.B.

IDRC Contribution: \$ 42570 CAD

Status: Active

3-P-88-0369

Community Participation in Health Care Delivery (Philippines)

Division: HS Programme: Health Systems Research

Community participation in the planning and management of primary health care (PHC) services, and in decision-making on health matters is the heart of the PHC movement. However, in Benguet Province, as elsewhere in the Philippines, there is a dearth of experience with this process. This project will develop and evaluate the effectiveness of strategies for promoting community participation in the planning and delivery of health services. The project will provide information on the process of community participation, and the factors which facilitate and impede the active participation of community members in designing and managing their own health services.

/primary health care/ /social participation/ /health planning/

Area under study: /Philippines/

Recipient(s): St. Louis University. College of Nursing, PH
Researcher(s): Fangayen, Fatima

IDRC Contribution: \$ 90930 CAD

Status: Active

*** TOTAL RECORDS PRINTED = 44 ***

3-P-88-0372

Research in PHC (Philippines)

Division: HS Programme: Health Systems Research

Community participation in the development process has widely been viewed as an important component toward achieving an equitable and sustainable growth. In the health sector, major attention in participatory development has been directed toward enhancing local institutional capability for planning and managing primary health care (PHC) activities. During the 1970's, a health care delivery system based on the PHC concept was established in the Philippines. However, as in many developing countries, functioning of the PHC delivery system was inadequate. The objective of this project is to gain an understanding of PHC development processes and context, and contribute toward the development of a rapid community profiling methodology which could be used for initiating and planning a sustainable PHC project. Case studies will be undertaken in four barangays (villages) in two municipalities where PHC or related projects have been implemented. The project will also support the establishment and operation of a network of four Filipino institutions involved in research on community participation in the planning and operation of PHC programs.

/primary health care/ /health conditions/ /health planning/
/social participation/ /community development/ /evaluation/
/institution building/
Area under study: /Philippines/

Commitment Date: 1989-06-21 Est. Completion: 1991-06-21

Recipient(s): Institute of Philippine Culture (IPC), PH
Researcher(s): Veneracion, Cynthia C.

IDRC Contribution: \$ 80380 CAD

Status: Active

3-P-88-0373

The Delivery of PHC in Cebu City (Philippines)

Division: HS Programme: Health Systems Research

Community members are involved rarely in the planning, and management of health and health-related services. This situation exists despite the lip-service paid to the community participation element of the Primary Health Care (PHC) model advocated and promoted by over 100 governments since 1978. This project will identify the predominant health problems of the urban poor in seven barangays in Cebu City in the Philippines. Researchers will identify the "knowledge, attitudes, and practices" (KAP) of the barangay populations with respect to the available PHC services; identify the perception of PHC providers with respect to available PHC services; determine the factors which influence the appropriateness and effectiveness of PHC services; and propose a model PHC program which addresses these issues.

/primary health care/ /urban areas/ /health conditions/
/health surveys/ /health planning/
Area under study: /Philippines/

Commitment Date: 1989-06-06 Est. Completion: 1991-06-06

Recipient(s): University of San Jose-Recoletos, PH
Researcher(s): Eturma, Carmen M.

IDRC Contribution: \$ 104570 CAD

Status: Active

3-P-88-0375

SAC-SAC (Philippines)

Division: HS Programme: Health Systems Research

The availability of and accessibility to primary health care (PHC) services in the province of Negros Oriental in the Philippines is very poor. The concept of community participation in the planning and management of health services is unknown. It has become evident that without active community participation PHC will not succeed. This project will carry out a community analysis of health needs using a participatory methodology with the ultimate objective of developing a more appropriate and effective community-managed PHC model. Researchers will identify the knowledge, attitudes, and practices of the barangay population with respect to the use of health care services; examine the structure and performance of the existing PHC system; identify the factors which limit the appropriateness and effectiveness of the system; and make recommendations to strengthen it.

/primary health care/ /health conditions/ /health planning/
/social participation/ /social surveys/ /attitudes/
Area under study: /Philippines/

Commitment Date: 1989-06-07 Est. Completion: 1991-06-07

Recipient(s): Silliman University, PH
Researcher(s): Nakao, Ramonita M.

IDRC Contribution: \$ 35880 CAD

Status: Active

3-P-88-1030

Research in Health Management / Administration (West Africa)

Division: HS Programme: Health Systems Research

A study carried out in 1987 on health services in Africa confirmed the urgent need for action regarding the development of health management capacity in the region. Responding to such a need, this project will lead to the creation of a department of health services management at the Centre africain d'études supérieures en gestion (CESAG), a post-graduate training institute. Specifically, the project will identify health services management problems in the region and the training needs of health managers; develop teaching material adapted to these needs; and evaluate this material and the associated training methods. The program will offer eleven short-term training sessions to various categories of managers and complete a long-term training cycle in health services management.

/health administration/ /management development/ /higher education/ /institution building/
Area under study: /West Africa/

Commitment Date: 1989-03-30 Est. Completion: 1993-03-31

Recipient(s): Université de Montréal. Département
d'administration de la santé, CA

Recipient(s): Centre africain d'études supérieures en gestion
(CESAG), SN

Researcher(s): Dussault, Gilles

Researcher(s): Gningue, Youssoupha

IDRC Contribution: \$ 616110 CAD

Co-funding Agencies:

CIDA

Funding: \$ 356000 CAD

Status: Active

3-P-89-0081

Community Control of Malaria (Thailand)

Division: HS Programme: Health Systems

The Malaria Collaborator Program was started in 1961 by the Ministry of Public Health as a strategy for dealing with the malaria problem in Thailand. The rationale for this volunteer program was to enable the Malaria Division, in the face of scarce resources, to provide adequate and efficient services to all people in endemic areas. Community involvement was recognized as fundamental in solving the problem of inadequate manpower and poor communication between malaria workers and villagers. The Ministry views the volunteer program as a very useful and economic tool in the management of the control program. However, a major obstacle to the efficiency of the program is the high turnover rate of volunteers. In this project, researchers will evaluate the program, which is now operating in the five malaria regions. Researchers will determine the factors responsible for the high turnover rate of volunteers; and examine the ideal characteristics of volunteers from the community perspective.

/malaria/ /disease control/ /social participation/
/volunteers/ /evaluation/
Area under study: /Thailand/

Commitment Date: 1989-08-21 Est. Completion: 1991-08-21

Recipient(s): Mahidol University, TH
Researcher(s): Kamolnetr Okanurak

IDRC Contribution: \$ 90180 CAD

Status: Active

3-P-89-0084

Revision and Testing of Health Systems Research Workshop Material

Division: HS Programme: Health Systems Research

Health systems research (HSR) workshops have been and are the principal method of introducing the uses of research for problem solving in the delivery of health care. However, an evaluation of completed IDRC workshops has revealed the need to revise and amplify training materials. This project will undertake the revisions and extensions of the materials; field test them in a variety of settings; and make course materials available for use in the promotion and extension of HSR in developing countries. Recommendations will also be prepared for the on-going evaluation of the workshops and the context in which they are most productive. At the end of this project, a fully operational scheme for the involvement in HSR of: health workers and middle-level health managers; researchers in universities and research institutions; decision-makers at policy level; and facilitators, trainers, and research unit managers will be ready for implementation in interested countries and will have been field tested.

/health services/ /research/ /health planning/ /decision making/ /health personnel/ /research workers/ /training programmes/ /teaching aids/ /evaluation/
Area under study: /Global/

Recipient(s): International Development Research Centre (IDRC), CA

Researcher(s): de Mata Silva, Fredy Antonio

Researcher(s): Kirya, B. George

IDRC Contribution: \$ 231860 CAD

Co-funding Agencies:

WHO
PAHO
USAID

Status: Active

3-P-89-0182

Household Health Care Utilization and Expenditure in Rural Kenya

Division: HS Programme: Health Systems Research

The government of Kenya proposes to introduce user fees for specific public health services to generate income to expand the provision of health facilities and services. However, there is a lack of information on the likely impact that user fees might have on the access and use of modern health care services by poor rural households, especially women and children. This project will determine patterns of health care service utilization and expenditure at the household level; and identify factors that may influence them. A set of hypotheses has been developed, aimed at testing the influence of age, sex, socioeconomic status, and seasons on utilization by rural households, particularly of modern health services. The data collected will provide policy and decision-makers with useful information regarding the current dependence of the population on free public health services and, thus, the potential deterrent effect the introduction of user fees might have on access and use of such services by households.

/public health/ /health services/ /health expenditures/
/rural areas/ /household surveys/
Area under study: /Kenya/

Commitment Date: 1990-03-29 Est. Completion: 1992-03-29

Recipient(s): African Medical and Research Foundation (AMREF)
, KE

Researcher(s): Kisuli, Wilson K.

IDRC Contribution: \$ 60900 CAD

Status: Active

3-P-89-0205

Health System Research in Thatta District (Pakistan) - Phase II

Division: HS Programme: Health Systems

In 1986, the Centre funded a two-year project to carry out a thorough situation analysis in Thatta District of Sindh Province in Pakistan. This phase II project will build upon the information accumulated, and benefit from the constructive relationships established with communities and government health services officials. The objectives of the project are to improve and upgrade the government and community health systems so as to achieve reduced mortality (death) and morbidity (illness), and better health status for the people of the province. This will be achieved by developing and testing health services and community development innovations, focussed on maternal and child health care in Thatta District. The project is designed around the new National Health Policy for Pakistan, and will serve as the basis for a health loan by the World Bank. Seven interventions will address problems at each level of the system.

/health services/ /health administration/ /health planning/
/maternal and child health/ /primary health care/
/evaluation/

Area under study: /Pakistan/

Commitment Date: 1991-01-15 Est. Completion: 1993-05-31

Recipient(s): Aga Khan University. Department of Community
Health Sciences, PK

Researcher(s): Bryant, John

IDRC Contribution: \$ 436950 CAD

Status: Active

3-P-89-0246

The Paradigm of Family Medicine in Less Industrialized Countries

Division: HS Programme: Health Systems

In the spring of 1989, IDRC funded a Research Workshop, which was held in Singapore. Present at this workshop were fourteen invited participants and six family medicine research facilitators from Canada. The participants were all from the less developed countries that are members of WONCA (The World Organization of National Colleges and Associations of Family Medicine), and each had been invited to bring to the workshop a draft research proposal specifically addressing issues of importance to them. During the workshop, the participants further developed their proposals. The Canadian family physician researchers provided, and will continue to provide, consultant support in the design and execution of the projects. This project will further facilitate three of the research proposals from Korea, Philippines, and India. These proposals all deal with the evaluation of educational programs, whether for practicing physicians or for medical students, and bear many implications for the role of family medicine in their respective countries. The aim is to develop collaborative research projects that could be completed and reported to the WONCA Conference in Vancouver in May 1992.

/family/ /medicine/ /research projects/ /scientific
cooperation/ /medical education/ /curriculum/ /evaluation/
Area under study: /Global/

Commitment Date: 1990-01-10 Est. Completion: 1992-07-10

Recipient(s): College of Family Physicians of Canada, CA
Researcher(s): Hennen, Brian

IDRC Contribution: \$ 74500 CAD

Status: Active

3-P-89-0326

Evaluation of Occupational Health Service Systems (Korea)

Division: HS Programme: Health Systems Research

Since 1962, industrial development in South Korea has been spectacular. This rapid industrialization has been accompanied, however, by an increase in occupational injuries and diseases. Although the importance of preventing occupational injuries and diseases has been recognized, the practice of occupational health services has been minimal and ineffective, particularly in small and medium-sized industries. This project will evaluate the performance of two different modes of occupational health care delivery, namely: group health services and individual health services. Also, researchers will identify the factors which affect the performance, and the relative effectiveness and efficiency of the two models. An evaluation system will be formulated and tested. Evaluation measures will include cost efficiency, services provided, workers' health status, risk factors, and aspects of safety. Data from three industrial complexes will be used.

/occupational medicine/ /occupational safety/ /small-scale industry/ /medium-scale industry/ /health services/ /models/ /evaluation/

Area under study: /Korea R/

Recipient(s): Catholic Industrial Medical Center, KR

Researcher(s): Kyu Sang Cho

Researcher(s): Park, Hayoung

IDRC Contribution: \$ 135920 CAD

Status: Active

3-P-89-0335

Field Trial of a Non-Invasive Scale

Division: HS Programme: Health Systems Research

The HB noninvasive colour scale was developed with funds from IDRC. The scale was developed to aid in screening patients for definitive anemia thereby maximizing the utilization of scarce available resources. The scale has 2 distinct sides, an orangish side as well as a purplish side. It is expected that the colours on each side will cover the whole normal heamoglobin range of 1 to 14.6 gm and beyond. This project will subject the scale to field trial in Nigeria to minimize intraobserver bias; evaluate its effectiveness in a field situation; evaluate its sensitivity and specificity; and calibrate and standardize it.

/deficiency diseases/ /blood/ /diagnosis/ /measuring
instruments/ /testing/ /field activity/
Area under study: /Nigeria/

Commitment Date: 1990-04-01 Est. Completion: 1990-12-31

Recipient(s): Lagos University Teaching Hospital, NG
Researcher(s): Ekunwe, Ebun O.A.

IDRC Contribution: \$ 12716 CAD

Status: Active

3-P-89-1014

Community Health Research (Ethiopia) - Phase II

Division: HS Programme: Health Systems

The aim of this project has been to strengthen community health training and research in Ethiopia. In Phase I, 30 Ethiopian physicians completed their Master's degree in community health; a Master's program was implemented to train district health managers in collaboration with the Ministry of Health, Addis Ababa University, and the WHO; and support was given to the undergraduate community health programs at the Jimma Institute of Health Sciences and the Gondar College of Health Sciences. In May 1988, a six-month Accelerated District Health Managers' Program was started, which is expected to cover all 359 new districts within the next five to seven years. Phase II will continue the teaching of research and analysis to candidates for the Master's degree in Community Health. IDRC support will be directed toward the research components of the Master's theses and for faculty research. Out-of-country training for faculty members will strengthen the three Ethiopian institutions to ensure sustainability of the training programs.

/primary health care/ /health planning/ /higher education/
/applied research/ /research capacity/
Area under study: /Ethiopia/

Commitment Date: 1989-09-11 Est. Completion: 1992-08-31

Recipient(s): McGill University. Dept. of Epidemiology and
Biostatistics, CA
Researcher(s): Larson, Charles

IDRC Contribution: \$ 881000 CAD

Co-funding Agencies:

CIDA

Funding: \$ 900000 CAD

World Health Organization (WHO)

Status: Active

3-P-89-1030

Seminar On Applied Research in Health (Benin)

Division: HS Programme: Health Systems Research

This project will offer two seminars on applied research in the health field to teachers at the Faculty of Science of the National University of Benin, in Cotonou. The 50 participants have already attended a series of seminars on the same subject supported by IDRC (3-A-87-2059). These two additional exercises will consolidate basic knowledge. Specific subjects to be addressed are: research methods in epidemiology; general indicators for a data set of descriptive statistics; identification of high risk groups along with the calculation of relative risk; and planning and validation of research instruments. Questions pertaining to data management, computer science, and the application of research results will also be discussed. Furthermore, the seminar will help participants to effectively edit a research report; formulate high quality research proposals for submission to financing agencies; and manage well-structured research projects.

/further training/ /research capacity/ /medical research/
/applied research/
Area under study: /Benin/

Recipient(s): Université Laval. Département de médecine
sociale, CA

Recipient(s): Université nationale du Bénin, BJ
Researcher(s): Girard, Jacques
Researcher(s): Bernard, Paul-Marie

IDRC Contribution: \$ 51460 CAD

Co-funding Agencies:

Université Laval de Québec

Status: Active

3-P-90-0006

Alternative Health Resources Utilization in Poor Urban Communities (Philippines)**Division: HS Programme: Health Systems Research**

Since 1979, the guiding policy of the Philippine Ministry of Health has been primary health care, the adoption of which marks the culmination of a long public policy evolution. While the health budget has risen considerably, it has not been able to match the growing needs of the population, particularly the urban poor. This project will evolve appropriate guidelines in community resources utilization for the financing of health services in poor urban communities in Metro Manila. Researchers will identify current income and expenditure patterns in health among these communities; determine resources from within and outside the communities that can be mobilized for health service delivery; explore the possibility and means by which the private sector can be tapped; evolve schemes by which the communities can extend financial and other forms of support for health care delivery; and evaluate the relative merits and limitations of the various schemes identified.

/primary health care/ /financing/ /health expenditures/
/resource allocation/ /urban areas/ /community development/
/social participation/
Area under study: /Philippines/

Commitment Date: 1990-05-09 Est. Completion: 1991-08-09

Recipient(s): Asia Meridian Management Corporation, PH
Researcher(s): Colayco, Jaime J.

IDRC Contribution: \$ 67616 CAD

Status: Active

3-P-90-0057

**Effectiveness of Maternal and Child Health Programs
(Botswana)**

Division: HS Programme: Health Systems

This project will attempt to critically examine the determinants of demand and use of antenatal care services in urban and rural Botswana. Availability of health services and household factors will be studied to understand possible constraints that women face as consumers and providers of health care. By using the household as the unit of analysis, the study sets out to examine the social and economic environment of pregnancy and its relationship to the utilization of a preventive health service. Factors to be examined include: perceived benefits and barriers to utilization; time and monetary cost to the mother seeking care; health facility characteristics; availability and use of alternative antenatal services; and economic characteristics of mothers and members of their household. The project will provide information to be used by planners and policy makers to improve accessibility, acceptability, and quality of antenatal care services.

/prenatal care/ /health services/ /pregnancy/ /household
surveys/ /programme evaluation/
Area under study: /Botswana/

Recipient(s): Botswana. Ministry of Health, BW
Researcher(s): Owuor-Omondi, Lucas

IDRC Contribution: \$ 74300 CAD

Status: Active

3-P-90-0061

Rapid Rural Appraisal Training Program

Division: AFNS HS SS FAD Programme: Forestry / Crops
Production Systems / Animal Production Systems / Agricultural
Economics / Health Systems Research

One of the common concerns of young researchers in francophone West Africa is that they do not possess the applied tools of qualitative field research. The result is often poorly defined research agendas, bewildered rural communities, and unfocussed data collection efforts. In response to these problems, this project will train a group of West African researchers and NGO staff in the use of rapid rural appraisal (RRA) and its associated qualitative research methods. Participants will be chosen from a variety of institutional settings, disciplines, and countries. This group will then train their colleagues in on-going research and NGO projects and will be available as trainers upon the request of other institutions in the region. Project participants will create sufficient teaching materials in French for use in future training sessions.

/training programmes/ /rural development/ /development
research/ /participatory research/ /data collecting/
/methodology/

Area under study: /West Africa/

Commitment Date: 1990-08-14 Est. Completion: 1992-08-14

Recipient(s): Catholic Relief Services (CRS), SN
Researcher(s): Hahn, Susan

IDRC Contribution: \$ 240567 CAD

Status: Active

3-P-90-0083

Community-based Mental Health Research (India)

Division: HS Programme: Health Systems Research / Community Program

India has formulated a "National Mental Health Programme (NMHP) - 1982" that seeks to integrate a mental health component in its primary care infrastructure. It is speculated that the primary health care worker can take on the responsibility of providing counselling support for persons with psychosocial problems and reach out to persons with severe mental illnesses by serving as a cost-effective bridge between the health care system and the community. This project will develop and evaluate a model program for the management of psychosocial and mental health problems in underserved rural communities of Thiruporur Block. Specifically, it will include the collection of data on the communities' perception of mental health problems and the creation of mental health education materials for primary health care personnel and volunteer lay workers, which will complement the existing training materials. If the model is successfully validated, results will be presented to policy planners so that the program might be replicated in other areas of India.

/mental health/ /primary health care/ /models/ /paramedical personnel/ /training/ /health education/ /teaching aids/
Area under study: /India/

Commitment Date: 1991-01-19 Est. Completion: 1994-01-19

Recipient(s): Schizophrenia Research Foundation, IN
Researcher(s): Magaswami, Vijay

IDRC Contribution: \$ 78360 CAD

Status: Active

3-P-90-0093

Community Health Practitioners (Korea)

Division: HS Programme: Health Systems Research

Community health practitioners (CHPs), registered nurses or licensed midwives, are the first-level primary health care (PHC) providers in Korea. They are, on their own, responsible for the health of the numerous underserved rural communities. A previous IDRC funded study (3-P-84-0148: "An Activity Analysis and Curriculum Development Study of Community Health Practitioners in Korea") revealed that the degree of community support in the CHP's tasks was a very important predictor of effective job performance. This observation has led the researchers to propose a more detailed examination of how community involvement can be incorporated into the CHP's program of activities for more effective PHC. This project will develop, implement, and test a community involvement training program; and assess the extent to which the use of CHPs trained in community involvement activates the PHC Councils, and the community at large, to increase their participation in the planning, implementation, and evaluation of PHC services. Progress will be regularly assessed and activities modified through constant feedback from the research team and interaction between the community and the CHP.

/paramedical personnel/ /primary health care/ /social participation/ /health planning/ /training/
Area under study: /Korea R/

Commitment Date: 1990-09-28 Est. Completion: 1992-09-28

Recipient(s): Yonsei University, KR
Researcher(s): Oh, Kasil

IDRC Contribution: \$ 103970 CAD

Status: Active

IDRIS.IDRIS

3-P-90-0149

Tuberculosis Control (India)

Division: HS Programme: Health Systems Research

Commitment Date: 1991-03-04 Est. Completion: 1994-03-04

Recipient(s): Foundation for Research in Community Health, IN
Researcher(s): Uplekar, Mukund

IDRC Contribution: \$ 198040 CAD

Status: Active

With half of the world's 20 million cases in India, tuberculosis continues to be a major cause of morbidity and mortality in the Indian population. In spite of the existence of effective means of prevention, case finding and treatment, the situation of tuberculosis in India has barely changed over the last few decades. At the present time only 16% of the cases of pulmonary tuberculosis in the community are successfully treated under the National Tuberculosis Programme, a programme that has been in operation for over 30 years.

This failure in application of available knowledge and technologies to solving persisting problems like tuberculosis has been acknowledged to be due chiefly to social and operational constraints.

This proposal aims to study the causes of failure of tuberculosis control programs in Maharashtra state and to develop recommendations for improving tuberculosis control measures at appropriate levels such as the public health services, the private health providers, the patients with tuberculosis and the people at large in both rural and urban areas.

3-P-90-0161

Public Health Training Needs Assessment (West Indies) - Phase II

Division: HS Programme: Health Systems Research

Commitment Date: 1991-01-02 Est. Completion: 1992-01-31

Recipient(s): University of the West Indies (UWI). Dept. of
Social and Preventive Medicine, JM
Researcher(s): Eldemire, Denise

IDRC Contribution: \$ 51430 CAD

Status: Active

The Department of Social and Preventive Medicine has offered training programmes in Public Health since 1972. In 1985 the Masters in Public Health was introduced and is the only such programme available in the Caribbean. The course is open to health professionals with appropriate qualifications. In 1988 an evaluation of the training programmes was completed and appropriate changes made to the Master of Public Health curricula.

Over the past two years the number of applicants for Master of Public Health course has increased to 40, but acceptances have remained at 15 due to staff constraints. The Department does not know how many posts in the region require postgraduate public health training over the next few years. This makes it very difficult to plan for the future.

The project is intended to provide baseline information for future development of the Department's public health training programmes by identifying the number of persons likely to require training over the next decade.

3-P-90-0175

Design and Evaluation of a Management Information System
(Egypt) - Phase II

Division: HS Programme: Health Systems Research

Commitment Date: 1990-12-28 Est. Completion: 1992-06-28

Recipient(s): Palestine Red Crescent Society (PRCS), EG
Researcher(s): Al-Khateeb, Younis

IDRC Contribution: \$ 239570 CAD

Status: Active

In February 1988, IDRC supported a project entitled: "Evaluation of Administration/Management of Health Services (Egypt)". This project was to identify the major deficiencies in the existing planning and decision-making structure and process of the Palestine Red Crescent Society (PRCS) and to develop guidelines to strengthen its planning and management capabilities.

The most important deficiency identified was the lack of a strong management information system to support research and decision-making as well as the iterative process involved in the evolution and operationalization of the National Health Plan.

The purpose of this request is to design and evaluate a model management information system that will be tested in the third level Palestine hospital in Cairo. This hospital also serves as the headquarters of the Palestine Red Crescent Society. If the model is successful, it will then have the capacity to analyze and coordinate the information generated from the community-based information systems that will be developed during a Phase III.

The ultimate aim is to create an organization that can effectively and efficiently respond to the health and health-related social needs of the Palestinian people who rely on its services.

3-P-90-0206

Management of Health Technology: English-speaking Caribbean

Division: HS Programme: Health Systems Research

Recipient(s): National Institute of Higher Education,
Research Science and Technology (NIHERST), TT

Recipient(s): Saint Lucia. Ministry of Health, LC

Recipient(s): Jamaica. Ministry of Health, JM
Researcher(s): Thompson, Paul
Researcher(s): Compton, George

IDRC Contribution: \$ 132550 CAD

Co-funding Agencies:

PAHO

Funding: \$ 364000 CAD

Health and Welfare Canada

Funding: \$ 114000 CAD

Status: Active

In spite of real progress in health care facilities and equipment innovation in the past decades, the health systems of the countries of the English-speaking Caribbean are not optimally organized to apply the primary health care strategies endorsed by all the governments. Many of the basic health needs of the population are not met at all; others are met at high cost; still others are met with inappropriate or excessively costly treatments.

Many of the deficiencies and inefficiencies of primary health care in the region are the result of management problems, in particular the management of health technologies. In general, mechanisms and procedures to assure access to the appropriate level of health care are faulty. Specifically, the distribution of equipment within the health sector is unsystematic. Problems of technology management are exacerbated by the rising costs and sophistication of imported medical devices.

The development of management systems for local health services would permit use and maintenance of existing resources in the primary health sector more efficiently. With no major increase in health budgets foreseen in the near future, a health technology management system would provide more cost effective care throughout the national health systems, especially at the local level. Savings could extend to the regional level through the coordination of purchasing of parts and maintenance.

This present proposal will result in pilot testing in Trinidad/Tobago, Jamaica and St. Lucia of interlocking management systems for planning, selecting, purchasing, using and maintaining health technologies for health care services, with an emphasis on phc services, in the English-speaking countries of the Caribbean. Other islands, and other aspects of this PAHO-driven initiative (see proposal) will be funded from other sources. Consultation has been, and will continue to be provided by the Bureau of Radiation and Medical Devices, Health & Welfare, Canada.

3-P-90-0231

Hospital Management Information System - Phase II

Division: HS Programme: Health Systems Research

Commitment Date: 1991-02-15 Est. Completion: 1992-08-15

Recipient(s): Fundacion la Previsora para la Seguridad Social
, CO

Researcher(s): Yepes, Francisco José

IDRC Contribution: \$ 159670 CAD

Status: Active

A hospital management information system previously developed in phases I (funded by the Previsora Foundation) and II (funded by IDRC and the Previsora Foundation) will be field-tested in three tertiary care hospitals in Colombia, evaluated, improved and simplified for potential general application.

Field-testing will include training of hospital personnel and gradual, full implementation of the system. Internal and external evaluations will be conducted. The internal evaluation will be carried out by each hospital's own staff. The outside evaluation will be the research team's responsibility. Both evaluations will rely upon already developed and new instruments. The new instruments will focus upon five key parameters: timetable, data collection, data processing, data analysis and acceptability to staff.

Based on the results of these evaluations, improvements and simplifications will be made to the system. At the completion of this phase, a fully operational hospital management information system should have been developed.

This new phase should pave the way to a potential subsequent one which would entail the development and/or adaptation of appropriate Workload Measurement Systems (WMS) necessary for hospital performance comparisons. It would also allow future evaluations of changes in the organizational climate of hospitals, changes hopefully leading to more informed decision-making and thus improved efficiency.

3-P-90-0297

Health System in Uruguay

Division: HS Programme: Health Systems Research

Uruguay's health care delivery system consists of coverage by the Ministry of Health and its network of providers, and by Institutions of Collective Medical Assistance (IAMCs). In the Canadian context, IAMCs compare to community health centres and are voluntary prepaid comprehensive health care insurance schemes. This project will focus on the evolution, performance and interrelationships of IAMCs, the most regulated and important element of the private sector. The methodology will include a study of the regulatory framework developed by the Ministry based on an analysis of legal documents and secondary data. The study will produce the first overall description of the IAMCs, especially as they relate to the public sector, and a framework for the analysis of the whole health care system.

/health services/ /private sector/ /evaluation/
/institutional framework/
Area under study: /Uruguay/

Commitment Date: 1991-05-16 Est. Completion: 1992-11-16

Recipient(s): Centro de Estudios de la Realidad Economica y
Social (CERES), UY
Researcher(s): Labadie, Gaston J.

IDRC Contribution: \$ 203580 CAD

Status: Active

3-P-90-0330

Health Services Utilization (Haiti) - Phase I

Division: HS Programme: Health Research Systems

Recipient(s): Association de santé publique d'Haïti - Centre
d'hygiène familiale, HT
Researcher(s): Morquette, Jean Hubert

IDRC Contribution: \$ 72500 CAD

Status: Active

Ce projet est une étude pilote qui vise à identifier les facteurs responsables de la sous-utilisation des services de la santé dans la commune de Miragoane.

Le projet qui sera mené par l'Association de santé publique d'Haïti en étroite collaboration avec le Ministère de la santé publique et de la population se déroulera de la façon suivante: les institutions sanitaires et les activités communautaires seront étudiées à travers la bibliographie, les données cliniques, les rencontres avec le personnel et les entrevues avec les dirigeants communautaires, les tradi-praticiens et les utilisateurs des services.

Les résultats seront transmis avec des recommandations au niveau décisionnel du Ministère de la santé publique. Les résultats serviront enfin de base au développement de la deuxième phase du projet - l'application des stratégies recommandées.

3-P-90-0336

Development of an Evaluative Model for Local Health Systems
(Argentina)

Division: HS Programme: Health Systems Research

Commitment Date: 1991-06-17 Est. Completion: 1992-06-17

Recipient(s): Centro de Apoyo al Desarrollo Local (CEADEL),
AR

Researcher(s): Moreno, Elsa Margarita

IDRC Contribution: \$ 152040 CAD

Status: Active

The project proposes the elaboration of an integral and comprehensive Evaluative Model for local health systems so as to contribute to their development.

The project target is to overcome the lack of evaluative models providing appropriate information for decision-making levels so that they may make decisions that will improve the local health systems performance. It is expected that the model to be elaborated results in a useful instrument to improve the levels of efficacy, efficiency, effectiveness, equity and social participation of the local health systems, even in the context of crisis.

The main methodological axes for the model elaboration are: the quantitative and qualitative approaches, interdisciplinary and participatory.

The development of the investigation will be made in two phases of one year duration each.

Phase I: Development of the Evaluative Model: The significant variables, the appropriate indicators, and the techniques and instruments will be defined for its operationalization.

Phase II: Evaluative Model application, testing, adjustment and dissemination. It will be applied in two Argentine local systems: the provinces of Neuquén and Rio Negro. From the results obtained the model's evaluative capability will be estimated, as well as the degree of adequacy of its characteristics as compared with those foreseen at the beginning-likewise, the corresponding adjustments will be made. Finally, the dissemination of the evaluative model, the experience made during the investigation, the techniques used in particular. This will help to reapply the model in other local systems in Argentina and in Latin América.

This present proposal/request for funding covers only Phase I.

3-P-90-0341

IV Latin American Workshop on Applied Health Research Methods
(Nicaragua)

Division: HS FAD Programme: Health Systems Research /
Training for Program Development

Commitment Date: 1991-07-04 Est. Completion: 1992-01-04

Recipient(s): Universidad Nacional Autonoma de Nicaragua, NI
Researcher(s): Salamanca, Fabio

IDRC Contribution: \$ 63160 CAD

Status: Active

In 1987, the Health Sciences Division started to implement a five-year plan aimed at strengthening health research capacity in the lesser developed countries of the Latin American regions.

The proposed training workshop in Nicaragua will provide short-term intensive training in applied research methods in the health sciences to 20 participants selected from academic institutions, the Ministry of Health and from the Nicaraguan Community Movement.

As a point of distinction from the three previous regional workshops held in Colombia, the Dominican Republic and Guatemala, the Nicaraguan workshop will be national in context and address the theme of "Essential National Health Research". It is expected that the workshop will catalyse multidisciplinary research on health problems that are a high priority for the people of Nicaragua.

The workshop will also provide an excellent opportunity to field test the revised Health Systems Research Workshop material developed in project 3-P-89-0084.

**HEALTH AND THE ENVIRONMENT
PROGRAM**

3-P-87-0043

Hepatitis B (St. Kitts/Nevis)

Division: HS Programme: Tropical and Infectious Diseases /
Health and the Environment

Investigations following an outbreak of viral hepatitis in 1984 in Saint Christopher and Nevis revealed an overall prevalence rate of 61 percent of Hepatitis B virus. As a result, the government is contemplating a nationwide prevention program through active immunization. This project will evaluate the immune response in infants and children of two Hepatitis B vaccines in terms of maximal conversion for lowest dosages and/or che

/infectious diseases/ /viruses/ /vaccination/ /immunology/
Area under study: /Saint Christopher and Nevis/

Commitment Date: 1987-09-29 Est. Completion: 1989-09-29

Recipient(s): Caribbean Epidemiology Centre (CAREC), TT
Researcher(s): Boyd-Scobie, C.

IDRC Contribution: \$ 259965 CAD

Status: Active

3-P-87-0085

Wells and Handpump Testing (Kenya)

Division: HS Programme: Water Supply and Sanitation /
Health and the Environment

In Kenya, the majority of the rural population is without a protected water supply. Water-borne diseases continue to be a major cause of infant morbidity and mortality. As piped water supplies for these rural areas are presently beyond the means of the country, the study of the groundwater/handpump option is considered a priority. This project will test the performance of a heavy duty version of the UNIMADE handpump (the Mark III) under field conditions in Kenya. The pumps will be tested in the field using large groups of approximately 100 people per pump. In addition, various conventional well digging/drilling techniques will be investigated. The relationship between water quality, pump performance, well cost and well type will be examined. Community acceptance and utilization of the newly developed water sources will be closely monitored, before and after the interventions. The results from this project will assist the Ministry of Health and the Ministry of Water Development in the formulation and implementation of rural water supply projects in the country.

/pumps/ /wells/ /testing/ /groundwater/ /water quality/
/training/ /social participation/
Area under study: /Kenya/

Commitment Date: 1988-01-14 Est. Completion: 1990-01-14

Recipient(s): Kenya Medical Research Institute (KEMRI), KE
Researcher(s): Karama, Mohamed

IDRC Contribution: \$ 200090 CAD

Status: Active

3-P-87-0086

Human Pathogen Survival (Zaire)

Division: HS Programme: Water Supply and Sanitation /
Health and the Environment

On-site sanitation facilities, particularly pit latrines, are being widely introduced as an initial step in promoting low-cost excreta disposal in developing countries. They present, however, two potentially serious disadvantages: (1) the risk of groundwater contamination from pathogenic microorganisms; and (2) the health risks associated with handling excreta either while emptying the pits or in using the excreta as fertilizer. In view of the increasing emphasis in on-site sanitation in both urban and rural areas of Zaire, it is necessary to investigate the nature of pathogen survival in stored excreta and to examine the effects of on-site sanitation on groundwater quality. This project will study the survival of human pathogens in latrine pit contents and the surrounding subsoil in order to determine the relationship between pit volume, detention time and emptying frequency. The aim is to minimize the health risks associated with groundwater pollution and the handling of pit contents.

/toilets/ /waste disposal/ /microorganisms/ /sanitation/
/public health/ /groundwater/ /water pollution/
Area under study: /Zaire/

Commitment Date: 1987-11-10 Est. Completion: 1989-11-10

Recipient(s): Comité de développement socioéconomique des
Baha'is du Haut Zaïre, ZR
Researcher(s): Raniga, Shaku

IDRC Contribution: \$ 98690 CAD

Status: Active

3-P-87-0105

Soil-transmitted Helminths (Indonesia) - Phase II

Division: HS Programme: Water Supply and Sanitation /
Tropical and Infectious Diseases / Health and the Community /
Health and the Environment

Soil-transmitted helminths (parasites) and various species of hookworm pose serious public health problems in most developing countries. In Indonesia, the prevalence of these parasites is relatively high as a result of poor sanitary conditions and the tropical climate which is ideal for their survival and transmission. Researchers in phase I of this project demonstrated that the improvement of water supply and sanitation facilities combined with health education and mass chemotherapy is a more effective strategy to control infection and re-infection rates than is mass drug treatment alone (3-P-82-0039). However, the effectiveness of this strategy is dependent on the proper utilization and maintenance of sanitary facilities. This second phase project seeks to demonstrate that with effective community mobilization and organization, such a strategy will be an effective long-term solution. Researchers will determine community knowledge, attitudes and practices concerning water supply and sanitation behaviour and related diseases. They will also design and implement a community-managed water supply and sanitation improvement program in a study village.

/parasitic diseases/ /disease control/ /health education/
/water supply/ /sanitary facilities/ /community development/
Area under study: /Indonesia/

Commitment Date: 1987-12-02 Est. Completion: 1990-06-02

Recipient(s): Gadjah Mada University. Department of
Parasitology, ID
Researcher(s): Noerhajati, Soeripto

IDRC Contribution: \$ 54300 CAD

Status: Closed

3-P-87-0122

Diagnosis of Dengue (Malaysia)

Division: HS Programme: Tropical and Infectious Diseases /
Health and the Environment

Dengue fever, a viral infection, is found in the tropics around the world. A more severe form of the disease, Dengue Haemorrhagic Fever/Dengue Shock Syndrome has been a feature of Dengue epidemics in Southeast Asia for almost 30 years. One of the major problems in the control of viral diseases is the difficulty in making an accurate and rapid diagnosis. Traditional laboratory diagnostic methods often require a one- or two-week waiting period, by which time the patient may recover or die, spend several needless days in isolation, or not be isolated and have transmitted the disease to others. The principal investigator of this project has conducted research to develop a rapid diagnostic test for Dengue using a new virus isolation technique. The objectives of this project are to perfect the rapid isolation technique, test it on a large series of patients and determine whether the technique can be used as an accurate predictor of which patients are at risk of developing the potentially fatal Dengue Haemorrhagic Fever.

/infectious diseases/ /viruses/ /diagnosis/
Area under study: /Malaysia/

Commitment Date: 1988-07-02 Est. Completion: 1991-07-02

Recipient(s): Universiti Sains Malaysia, MY
Researcher(s): Cardoso, Mary Jane

IDRC Contribution: \$ 135870 CAD

Co-funding Agencies:

Wellcome Trust
Funding: \$ 84500 CAD

Status: Active

3-P-87-0124

Typhoid Porins (Chile)

Division: HS Programme: Tropical and Infectious Diseases /
Health and the Environment

Chile has a high incidence of typhoid fever, approximately 100 cases a year per 100 000 inhabitants. It shares this problem with many less developed countries. To help control the disease an efficient and simple immunodiagnostic procedure is needed. Researchers have discovered that there is a marked reaction to typhoid porins in the serum of acute typhoid patients. Porins are a group of protein found in the outer membrane of the typhoid bacillus. They have not previously been utilized in laboratory or clinical studies of typhoid. The objective of this project is to confirm the antibody response to typhoid porins in a sample of patients (both acute and convalescent), chronic carriers, and previously vaccinated volunteers.

/typhoid/ /diagnosis/ /immunology/
Area under study: /Chile/

Commitment Date: 1987-11-13 Est. Completion: 1989-11-13

Recipient(s): Pontificia Universidad Catolica de Chile.
Department of Cell Biology, CL
Researcher(s): Leighton, Federico

IDRC Contribution: \$ 179290 CAD

Status: Active

39-87-0130

Filariasis (Dominican Republic)

Division: HS Programme: Tropical and Infectious Diseases /
Health and the Environment

Although it is known that lymphatic filariasis is endemic in certain Caribbean islands and in Central and South America, and that its causal agent is *W.bancrofti*, there is little information concerning its transmission in the Dominican Republic. Cabral, in the north of Barahuna province, has been identified as an endemic area. However several aspects still require clarification. The general objective of this project is to determine several epidemiological characteristics in the transmission of filariasis in Cabral, specifically: to determine the prevalence of *W.bancrofti* and the intensity of infection; to determine the morbidity and clinical aspects of filariasis in the population; and to determine the species of mosquitoes involved, its rate of natural infection, and the ecological factors favouring the breeding sites of the vectors. The results of this research will be incorporated into recommendations to the Ministry of Health on treatment programs for patients and the best measures for an adequate control program.

/filariasis/ /disease transmission/ /epidemiology/ /disease
vectors/ /disease control/
Area under study: /Dominican Republic/

Commitment Date: 1988-06-27 Est. Completion: 1990-06-27

Recipient(s): Centro de Investigaciones Biologicas y
Adiestramiento (CIBIA), DO
Researcher(s): Vargas, Mercedes

IDRC Contribution: \$ 121850 CAD

Status: Active

3-P-87-0137

Leishmaniasis (Ethiopia)

Division: HS Programme: Tropical and Infectious Diseases /
Health and the Environment

Visceral leishmaniasis (VL), a disease causing death and hardship in rural areas, is transmitted to man by sandflies usually from infected animals. In Ethiopia, early reports have indicated the existence of VL in southwestern and southern regions. However, the magnitude of the problem and the socioeconomic implications have not been investigated, particularly in the context of the country's extensive community resettlement programs. This project will determine the extent of VL and its socioeconomic implications in agricultural and resettlement areas in the southwestern region of the country, with a view to recommending intervention strategies. Maps of the study areas will be employed and relevant demographic and socioeconomic information will be collected. Complete medical history, physical examination and relevant laboratory tests will be carried out. Preliminary information on transmission patterns in the areas including potential vectors and reservoirs will be documented for subsequent follow-up studies.

/tropical diseases/ /epidemiology/ /disease vectors/ /disease
control/ /disease transmission/ /resettlement/
/leishmaniasis/
Area under study: /Ethiopia/

Commitment Date: 1988-06-09 Est. Completion: 1991-06-09

Recipient(s): Addis Ababa University, ET
Researcher(s): Teklemariam Ayele

IDRC Contribution: \$ 216085 CAD

Status: Active

3-P-87-0138

Neurocysticercosis (Peru)

Division: HS Programme: Tropical and Infectious Diseases /
Health and the Environment

Cysticercosis is a common parasitic disease of the central nervous system (CNS) in developing countries. The disease is estimated to affect over 200 000 people in Peru alone. Methods of detection and clinical diagnosis are relatively controversial among investigators. Diagnosis of cysticercosis is made by clinical criteria, computerized Axial Tomography (CAT) scan, and by serological procedures which are not completely reliable. They are also expensive and time consuming. This project addresses the development of a rapid ELISA assay based on scolex exo-antigens of cultured *Taenia solium* larvae. The technique will be tested on sera samples and cerebrospinal fluid collected from patients. The test, if proven to show a high degree of sensitivity and specificity, will be utilized for subsequent epidemiological studies in the community and for detecting infected animals.

/parasitic diseases/ /nervous system/ /diagnosis/ /tests/
Area under study: /Peru/

Commitment Date: 1988-03-21 Est. Completion: 1989-09-21

Recipient(s): Universidad Peruana Cayetano Heredia, PE
Researcher(s): Sanchez, Elba Miranda

IDRC Contribution: \$ 161140 CAD

Status: Active

3-P-87-0151

AIDS Diagnosis (PATH-Global) - Phase I

Division: HS Programme: Tropical and Infectious Diseases

The acquired immune deficiency syndrome (AIDS) has become recognized as a global health problem. It is estimated that at least several million people worldwide have been infected with the causative agent, referred to as human immunodeficiency virus (HIV). Early and accurate diagnosis of AIDS still remains a major problem confronting health authorities throughout the world. This project will address the development and testing of a simplified, economical approach to the diagnosis of AIDS that would be relevant to developing countries. In its laboratory, PATH (Program for Appropriate Technology in Health in Seattle, Washington) has shown feasibility of a dot immunobinding assay for determination of ABO blood groups. Researchers will further develop this technology for the detection of antibodies to the HIV group of viruses by aiming towards the production of an inexpensive and reliable dip-stick test. Prototype assays for HIV-1 will be developed and their performance evaluated in the laboratory.

/infectious diseases/ /diagnosis/ /new technology/ /AIDS/
Area under study: /Global/

Commitment Date: 1987-10-23 Est. Completion: 1988-10-23

Recipient(s): Program for Appropriate Technology in Health
(PATH), US
Researcher(s): Auditore-Hargreaves, Karen

IDRC Contribution: \$ 47260 CAD

Status: Closed

3-P-87-0155

Occupational Health in the Metal Industry (Mexico)

Division: HS Programme: Occupational Health and
Environmental Toxicology / Health and the Environment

The purpose of this project is to validate a participatory research methodology. The methodology used was based on a collective questionnaire on working conditions in the metal industry in Mexico and their impact on the health of workers. Through this validation exercise, researchers hope to demonstrate that the industrial workers under the supervision of their union and consultant scientists, can make a valuable assessment of occupational risks present in their workplace, as well as related consequences on workers. Researchers will analyze the reliability of the methodology, its possible bias and utility as a base for specific measurements, in order to make the adjustments necessary to propose it as a general methodology.

/occupational diseases/ /occupational safety/ /working
conditions/ /industrial workers/ /participatory research/
/methodology/
Area under study: /Mexico/

Commitment Date: 1987-12-18 Est. Completion: 1989-09-18

Recipient(s): Universidad Autonoma Metropolitana-Xochimilco,
MX

Researcher(s): Laurell, Cristina

Researcher(s): Noriega, Mariano

IDRC Contribution: \$ 100430 CAD

Status: Active

3-P-87-0173

Pollution Load in the Msimbazi Stream (Tanzania)

Division: HS Programme: Water Supply and Sanitation /
Health and the Environment

The Msimbazi Stream, which bisects the city of Dar es Salaam, Tanzania, represents an important water resource for agricultural, industrial and domestic activities. But the uncontrolled discharge into the river of various pollutants from these activities reduces water quality. As the Msimbazi is a major source of drinking water for the majority of low-income residents of Dar es Salaam, its worsening quality is causing concern. This project will evaluate the nature and degree of pollution of the Msimbazi Stream. Researchers prepared a report with recommendations for the introduction of appropriate pollution control policies and practices to the Tanzanian Ministry of Water (MAJI), the body responsible for developing and implementing water pollution control policy for Tanzania.

/river pollution/ /pollution sources/ /water quality/
/sampling/ /pollution control/
Area under study: /Tanzania/

Commitment Date: 1988-07-18 Est. Completion: 1990-01-18

Recipient(s): University of Dar es Salaam. Civil Engineering
Department, TZ
Researcher(s): Msimbe, L.G.
Researcher(s): Mashauri, D.A.

IDRC Contribution: \$ 71760 CAD

Status: Active

3-P-87-0187

Hepatitis B Vaccine in School Children (Egypt)

Division: HS Programme: Tropical and Infectious Diseases /
Health and the Environment

Liver disease is a major cause of disease and death in Egypt. Although schistosomiasis has been held responsible for the majority of cases of chronic liver disease in the country, it is now increasingly evident that chronic liver disease caused by Hepatitis B virus infections (HBV) has been growing. There is also more evidence towards an association of accompanying infections of HBV and schistosomiasis. Addressing this problem and considering the increasing availability of hepatitis B vaccine, this project will study the antibody response to HBV recombined yeast vaccine in schistosomiasis infected and in uninfected children of three rural primary schools in Ismailia. It is anticipated the study will provide important information for health planners on possible prevention/control programs for HBV and shed further light on the interrelationship and interaction of HBV and schistosomiasis in Egypt.

/viruses/ /vaccination/ /schistosomiasis/ /immunology/
/school-age population/
Area under study: /Egypt/

Commitment Date: 1988-06-14 Est. Completion: 1990-06-14

Recipient(s): Suez Canal University. Department of Medicine,
EG

Researcher(s): Nooman, Zohair M.

IDRC Contribution: \$ 85725 CAD

Status: Active

3-P-87-0198

Epidemiology of Dengue (Malaysia) - Phase II

Division: HS Programme: Tropical and Infectious Diseases /
Health and the Environment

Dengue fever (DF) and the potentially fatal dengue haemorrhagic fever (DHF) continue to be important public health problems in Malaysia, accounting for high morbidity and mortality in children. In phase I of this project, it was found that, by the age of 20, most Malaysians had been exposed to the dengue virus. A study was initiated to monitor a sample of school children's exposure to dengue, and establish a relationship with this and with several entomological, epidemiological, and virological factors. This phase II project will continue to monitor the children for three more years. Researchers will determine the transmission of dengue virus in the sample population; relate this to the occurrence of well-characterized clinical cases of DF/DHF based on strict WHO criteria; collect dengue virus strains for antigenic and biological analysis; and relate the occurrence of DF/DHF to vector density and other parameters, including age, sex, ethnic group, nutrition, and socioeconomic status. Researchers will recommend measures to create a surveillance program, leading to more effective control of the disease.

/infectious diseases/ /epidemiology/ /viruses/
Area under study: /Malaysia/

Commitment Date: 1988-06-27 Est. Completion: 1991-06-30

Recipient(s): University of Malaya, MY
Researcher(s): Lam, S.K.

IDRC Contribution: \$ 100550 CAD

Status: Active

3-P-87-0204

Bilharzia (Egypt) - Phase IV

Division: HS Programme: Tropical and Infectious Diseases /
Health and the Environment

The control of schistosomiasis in the Nile delta through the use of the plant molluscicide *Ambrosia maritima* (Damsissa) has been the subject of IDRC-supported research for the past ten years. This Phase IV project will continue the work of Phase III, and expand the study protocol to a new area. It will also involve conducting a KAP study, and studying the toxicology of *A.maritima* for snail control combined with praziquantel case treatment in an established farming area. This study will assess the same approach in a reclaimed resettlement area which is at risk of schistosomiasis spread; determine socio-behavioural activity that causes acceptance of *A.maritima* by the community to increase, and estimate the requirements for sustained self-help in *A.maritima* control strategies. Researchers will perform toxicological studies on *A.maritima*, including its effect on aquatic non-target organisms.

/schistosomiasis/ /disease control/ /plants/ /toxicology/
Area under study: /Egypt/

Commitment Date: 1988-08-04 Est. Completion: 1991-08-04

Recipient(s): University of Alexandria. Dept. of Tropical
Public Health, EG
Researcher(s): El-Sawy, M.F.

IDRC Contribution: \$ 356080 CAD

Status: Active

3-P-87-0211

Tuberculosis Annual Risk (Botswana)

Division: HS Programme: Tropical and Infectious Diseases /
Health and the Environment

In Botswana, tuberculosis is the single most important cause of patient disease and death. According to WHO, Botswana has the highest tuberculosis notification rate in the world. The Botswana Tuberculosis Control Programme has been underway for 12 years without a satisfactory study of the trend of disease. This project will support a tuberculin survey of the next primary school intake of students to determine: the tuberculin positivity rate; the BCG scar rate; the proportion of tuberculin positives due to tuberculosis; and calculate the annual risk of tuberculosis infection. The project will provide data to assess the Tuberculosis Control Programme and a statistical basis for future routine surveys.

/tuberculosis/ /health surveys/ /disease control/
Area under study: /Botswana/

Commitment Date: 1988-07-14 Est. Completion: 1989-07-14

Recipient(s): Botswana. Ministry of Health, BW
Researcher(s): Osei, William Dwamena

IDRC Contribution: \$ 71740 CAD

Status: Active

3-P-87-0221

Malaria Field Incubator (Philippines/Global)

Division: HS Programme: Tropical and Infectious Diseases /
Health and the Environment

Malaria remains the most devastating disease in developing countries and anti-malarial drugs remain as the first-line of control. One of the principle achievements in malariology in recent years has been the development of a method to cultivate the malaria parasite, *Plasmodium falciparum*, outside the human body. The international standardization of this culture method by the World Health Organization (WHO) to allow global monitoring of the response of malaria parasites to anti-malarial drugs has now been achieved and monitoring is underway in most malaria-endemic developing countries where drug resistant malaria is evolving. The Malaria Action Programme of WHO has developed and field-tested an incubator for maintaining parasites in culture. This project will result in the supply of 100 non-profit incubators to research teams in several countries in the first year and provide revolving fund support for subsequent production cycles.

/malaria/ /disease control/ /research equipment/
Area under study: /Global/

Commitment Date: 1989-04-03 Est. Completion: 1990-04-03

Recipient(s): World Health Organization/Regional Office for
the Western Pacific (WHO/WPRO), PH
Researcher(s): Santos, Maximino N.

IDRC Contribution: \$ 50270 CAD

Status: Active

3-P-87-0241

Mining Sector (Bolivia)

Division: HS SS Programme: Occupational Health and
Environmental Toxicology / Health and the Environment /
Population and Development

Very little is known about the health disease process in mining communities in Bolivia. This study will examine health conditions of people working in a state-owned mine (Huanuni) and a cooperative mine (Unificada). Researchers will examine the epidemiological profile of the miners and their families and analyze possible determinants including factors such as education, feeding habits, nutrition levels, social services, occupation and income characteristics, health practices, medication habits, cultural beliefs, and social participation. The project includes the analysis of clinical histories, a survey of 167 families, and participant observation. The population's participation into the research process will be encouraged to allow later feedback and elaboration of possible policy recommendations.

/mining/ /tin/ /miners/ /health conditions/ /health surveys/
Area under study: /Bolivia/

Commitment Date: 1988-06-16 Est. Completion: 1990-06-16

Recipient(s): Comité Ejecutivo de la Universidad Boliviana
(CEUB), BO

Researcher(s): Villarroel, Miryam Gamboa

IDRC Contribution: \$ 147444 CAD

Status: Active

3-P-87-0249

Hepatitis B Immunization/PATH (China)

Division: HS Programme: Health and the Environment / Health Systems Research

China has officially declared that the conquest of hepatitis B and its most serious outcome, liver cancer, is of the highest priority among disease control programs. The Ministry of Public Health has also declared that hepatitis B vaccination should be integrated into China's Expanded Programme on Immunization (EPI) as soon as possible, and that a vaccine delivery system, capable of providing protection against hepatitis B to all Chinese infants, be established. The objectives of this project are to reduce the incidence of hepatitis B infection and its chronic viral carrier state in infancy and early childhood in Long An County through determination of the most appropriate way to combine hepatitis B vaccination with other EPI vaccines; and to alter the structure of rural EPI delivery services in Long An County to allow the delivery of the first dose of hepatitis BH vaccine 24-48 hours after birth and to evaluate the delivery of additional doses of this vaccine simultaneously with several other EPI immunogens.

/infectious diseases/ /viruses/ /disease control/
/vaccination/ /infants/ /rural areas/
Area under study: /China/

Commitment Date: 1988-08-31 Est. Completion: 1992-08-31

Recipient(s): Program for Appropriate Technology in Health (PATH), CA

Researcher(s): Ding Zheng-Rong

IDRC Contribution: \$ 334525 CAD

Co-funding Agencies:

WHO

Funding: \$ 38700 CAD

Status: Active

3-P-87-0271

Yellow Fever Vaccine (Nigeria)

Division: HS FAD Programme: Tropical and Infectious
Diseases / Health and the Environment / Training for
Institutional Development

Yellow fever, an acute viral disease, is still a major public health problem in tropical Africa. The most recent epidemics in Nigeria occurring in the fall of 1986 and spring of 1987, resulted in an estimated 15,000 cases with 5,000 deaths. The Federal Ministry of Health has strongly committed itself to the inclusion of yellow fever vaccination in the Expanded Programme on Immunization (EPI) as a measure of increasing the population's immunity level. This project will promote the modernization and the strengthening of the Yellow Fever Vaccine Laboratory facilities at Yaba, Lagos; promote the adoption, in all steps of production and quality control, of good manufacturing practices and ensure their compliance with WHO requirements; and promote the upgrading of the vaccine production laboratory to manufacture increased quantities and improve the quality of the vaccine with the development of thermostable formulation.

/yellow fever/ /disease control/ /vaccines/ /laboratories/
/quality control/ /technical cooperation/ /training/
/institution building/
Area under study: /Nigeria/

Commitment Date: 1988-06-20 Est. Completion: 1991-06-20

Recipient(s): Nigeria. Ministry of Health, NG
Researcher(s): Nasidi, A.Y.

IDRC Contribution: \$ 1155120 CAD

Co-funding Agencies:

WHO

Funding: \$ 30000 CAD

CIDA

Funding: \$ 554600 CAD

Status: Active

3-P-87-0281

Tropical Diseases Research (Global) - VII

Division: HS Programme: Tropical and Infectious Diseases /
Health and the Environment

The Special Programme for Research and Training in Tropical Diseases was planned and initiated by the World Health Organization (WHO) with the assistance and co-sponsorship of the United Nations Development Program (UNDP) and the World Bank. The Programme's activities relate to six major tropical diseases: malaria, schistosomiasis, filariasis, trypanosomiasis, leishmaniasis and leprosy. The Programme has been very successful in encouraging academia, industry, and government ministries and institutions to collaborate and produce new methods for the control of these diseases. This grant will support the continued effort of the Programme to develop, through combined application of biomedical, clinical, epidemiological and operational research, new tools for the prevention, diagnosis and treatment of tropical diseases; and to strengthen the research capabilities of developing countries by providing training in biomedical sciences and various forms of institutional support.

/tropical diseases/ /parasitic diseases/ /disease control/
/prophylaxis/ /epidemiology/ /medical research/ /research
capacity/ /scientific cooperation/ /training assistance/
Area under study: /Global/

Commitment Date: 1988-06-10 Est. Completion: 1990-06-10

Recipient(s): World Health Organization (WHO), CH
Researcher(s): Godal, Tore

IDRC Contribution: \$ 400000 CAD

Co-funding Agencies:

UNDP
World Bank

Status: Closed

3-P-87-0287

Pesticide Poisoning (Jordan)

Division: HS Programme: Occupational Health and
Environmental Toxicology / Health and the Environment

In the Jordan Valley of the West Bank, pesticide spraying of crops has increased tremendously in the last 20 years. This project will evaluate the extent to which farmers in the area are exposed to the organophosphate pesticides, used commonly throughout the West Bank. It will study skin exposure to pesticides and the effects they may have on whole blood cholinesterase levels of exposed farmers. It will also study attitudes regarding the handling of pesticides that may contribute to undue exposure. The information from this study will be used in programs to reduce the occupational hazards to which farmers and their families are exposed.

/pesticides/ /poisoning/ /farmers/ /occupational safety/
/occupational medicine/
Area under study: /Jordan/

Commitment Date: 1988-06-08 Est. Completion: 1990-09-30

Recipient(s): Birzeit University, IL
Researcher(s): Sansur, Ramzi

IDRC Contribution: \$ 48770 CAD

Status: Closed

3-P-87-0292

Cadmium and Arsenic Intoxication of Children (Mexico)

Division: HS Programme: Occupational Health and
Environmental Toxicology / Health and the Environment

This is a study of the potential impact on health of environmental pollution by the toxic metals arsenic and cadmium, the by-products of copper and zinc smelter operations in San Luis Potosi, Mexico. The study focusses on the health status of 3-5 year old children living in high and moderately polluted urban environments and in a rural control community. Clinical findings, as well as the arsenic and cadmium content of hair and urine samples will be examined in relation to levels of arsenic and cadmium in air, water, dust and soil. Educational improvements will be based on the results and recommendations will be presented to the federal authorities.

/arsenic/ /cadmium/ /pollution level/ /measurement/ /health
conditions/ /children/ /health education/ /pollution control/
Area under study: /Mexico/

Commitment Date: 1988-05-27 Est. Completion: 1990-05-27

Recipient(s): Universidad Autonoma de San Luis Potosi, MX
Researcher(s): Diaz-Barriga Martinez, Fernando
Researcher(s): Santos Diaz, Miguel Angel

IDRC Contribution: \$ 78680 CAD

Co-funding Agencies:

Secretaria de Desarrollo Urbano y Ecologia (SEDUE)

Status: Closed

3-P-87-0304

Hepatitis B Vaccine in Schistosomiasis (Egypt)

Division: HS Programme: Tropical and Infectious Diseases /
Health and the Environment

In Egypt, viral hepatitis and intestinal schistosomiasis are the two leading causes of chronic liver disease. It has recently been shown that hepatitis B virus infection results in unusually severe liver disease if patients have a concurrent "Schistosoma mansoni" infection. Hepatitis B can now be prevented by vaccination which, although expensive, is becoming increasingly affordable. Egypt is considering selectively offering this vaccine to vulnerable populations with a high prevalence of schistosomiasis. This project will evaluate the effectiveness (immunogenicity) of vaccination against HBV in schistosomiasis infected individuals, so appropriate preventive strategies can be developed. Cases and controls will be selected from in- and out-patients at Kasr el Aini Hospital and the Theodor Bilharz Institute for Research.

/viruses/ /vaccination/ /schistosomiasis/ /immunology/
Area under study: /Egypt/

Commitment Date: 1989-02-27 Est. Completion: 1992-02-27

Recipient(s): University of Cairo. Department of Tropical
Medicine, EG
Researcher(s): Ali, E. Gareem A.

IDRC Contribution: \$ 127000 CAD

Status: Active

3-P-87-0308

Epidemiology of Hepatitis B (Mozambique)

Division: HS Programme: Tropical and Infectious Diseases /
Health and the Environment

Very little is known about the epidemiology of Hepatitis B in Mozambique. However, those studies that have been done revealed a disturbingly high rate of chronic active infection (over 10 percent). This project aims to answer basic questions on the Hepatitis B virus (HBV) epidemiology in Maputo, a city situated in the south of Mozambique, and to evaluate a HBV vaccine and vaccination schedules adequate to the country's conditions. Researchers will characterize the pattern of HBV infection; evaluate the efficacy of a HBV vaccination scheme administered to infants; and evaluate the feasibility and potential benefits of a prevention strategy including mass vaccination.

/infectious diseases/ /viruses/ /epidemiology/ /vaccination/
Area under study: /Mozambique/

Commitment Date: 1988-08-01 Est. Completion: 1991-01-31

Recipient(s): Mozambique. Ministerio de Saude, MZ
Researcher(s): Barreto, Jorge

IDRC Contribution: \$ 193682 CAD

Status: Active

3-P-87-0309

AIDS Health Education (Uganda)

Division: HS Programme: Tropical and Infectious Diseases /
Health and the Environment

Preliminary results from studies of healthy adult blood donors and pregnant women in the urban Kampala area of Uganda indicate an HIV (Human Immunodeficiency Virus) infection prevalence rate of 13-14 percent in both males and females between the ages of 15 and 45. This study will try to understand people's knowledge, attitudes and practices concerning AIDS in Uganda. Data will be gathered through personal interviewing to assess how people's knowledge, attitudes and practices with respect to AIDS are influenced by variables such as: locality; education; age; religious affiliation; sex; economic status mobility and marital status. The findings of the study will be used to develop and implement a health education program concerning AIDS prevention in Uganda.

/AIDS/ /attitudes/ /sexual behaviour/ /social surveys/
/health education/
Area under study: /Uganda/

Commitment Date: 1989-03-07 Est. Completion: 1991-10-01

Recipient(s): Uganda. Ministry of Local Government, UG
Researcher(s): Kahororo, Edward

IDRC Contribution: \$ 33395 CAD

Status: Active

3-P-87-0318

Hookworm (Indonesia)

Division: HS Programme: Tropical and Infectious Diseases /
Health and the Environment

In Bali, preliminary surveys indicate a high prevalence of hookworm infestation, a finding confirmed by hospital and health centre records. The Provincial Health Department of Bali is seriously concerned about the deteriorating situation, and has encouraged the University of Udayana Medical School to conduct a study with their collaboration to define the real situation with a view to planning suitable control measures. This study aims to determine the prevalence and intensity of hookworm infestation in four sub-districts, and to define its relationship to iron deficiency anemia in the population. Environmental factors associated with transmission of the infection will also be observed. Methodologies will include blood and fecal examination from individuals and the use of questionnaires and soil examination on a sampling scheme. Data analysis will be done using the University's computer.

/parasitic diseases/ /epidemiology/ /deficiency diseases/
/blood/

Area under study: /Indonesia/

Commitment Date: 1988-07-11 Est. Completion: 1990-07-11

Recipient(s): Udayana University. Dept. of Parasitology, ID
Researcher(s): Tjokorda Rai

IDRC Contribution: \$ 68500 CAD

Status: Active

3-P-87-0342

Chagas' Disease Prevention via Improved Housing (Paraguay)

Division: AFNS HS SS COMM EES Programme: Forestry /
Tropical and Infectious Diseases / Population and Education
Research / Building Industry Materials and Technologies /
Health and the Environment

Almost every country in Latin America is affected by Chagas' disease (American trypanosomiasis), and is seeking cost-effective control strategies. In the absence of effective drugs and vaccines suitable for large-scale treatment, the only real form of control lies in a preventive approach. In Paraguay, the focus will be on the control of triatomine insects that transmit the disease. Triatomine control strategies include insecticide spraying and housing improvements resulting from increased community awareness of the problem. This project will compare three types of intervention: insecticide application; housing improvement; and a combined insecticide/housing intervention, in three similar communities. Evaluation of the effect of the interventions will be made using a pre and post intervention assessment. Based on project results, researchers will recommend appropriate strategies for the control of Chagas' disease.

/trypanosomiasis/ /disease control/ /evaluation/
/insecticides/ /housing/ /health education/ /community
development/ /social participation/
Area under study: /Paraguay/

Commitment Date: 1988-08-26 Est. Completion: 1991-09-30

Recipient(s): Universidad Catolica de Paraguay, PY
Researcher(s): Rios, Luis Silvio
Researcher(s): Arias, Antonieta

IDRC Contribution: \$ 659490 CAD

Status: Active

3-P-87-1039

Groundwater Pollution (Tanzania)

Division: HS EES Programme: Water Supply and Sanitation /
Earth Sciences / Health and the Environment

In Dar es Salaam, the municipal water supply system is unreliable, providing water intermittently. Both the municipal water distribution system (due to frequent depressurization) and the traditional shallow wells are contaminated by many sources including on-site waste disposal systems. In view of the increasing emphasis on on-site sanitation in Tanzania, the effects of on-site sanitation on groundwater quality must be investigated. The primary objective of this project is to develop guidelines for the siting, design and construction of on-site sanitation and on-site water supply (dug wells/boreholes) systems to minimize the serious water contamination problems. The project will also provide important hydrogeological data on contaminant movement in a shallow unconfined aquifer. It is expected the results of this project can be applied to other groundwater contamination problems in other African cities where both shallow wells and on-site waste disposal systems are common.

/waste disposal/ /groundwater/ /wells/ /water pollution/
/hydrogeology/ /water distribution/ /mapping/
Area under study: /Tanzania/

Commitment Date: 1988-03-02 Est. Completion: 1990-03-02

Recipient(s): Centre for Housing Studies, TZ
Researcher(s): Mgana, S.

IDRC Contribution: \$ 179704 CAD

Status: Active

3-P-88-0071

Evaluation of Environmental Sanitation (Brazil)

Division: HS Programme: Health and the Environment / Water Supply and Sanitation

In Brazil, diarrheal diseases constitute the second leading cause of morbidity and mortality in infants and small children. Many peri-urban slums in the city of Salvador lack basic sanitation services. Some actions are beginning to be taken to provide non-convention stormwater and wastewater collection systems. The impact on health has not yet been established. Major environmental health policies are under development. This study will examine the effect of two different low-cost sewerage technologies on diarrheal diseases with a focus on intestinal nematode infections and nutritional status. This project will assist in determining the health impact of sanitation improvements in poor peri-urban areas and will support the development of environmental health policies.

/sanitation services/ /slums/ /health conditions/ /diarrhoeal diseases/ /health policy/
Area under study: /Brazil/

Commitment Date: 1989-03-08 Est. Completion: 1991-03-08

Recipient(s): Universidade Federal de Bahia, BR
Researcher(s): Moraes, Luiz Roberto S.

IDRC Contribution: \$ 151190 CAD

Status: Active

3-P-88-0072

Water Quality (Malawi)

Division: HS Programme: Health and the Environment / Water Supply and Sanitation

Malawi has resolved to respond positively to the goals of the International Drinking Water Supply and Sanitation Decade (1981-1990). The government's objective is to provide safe water to rural communities through an active community participation and hygiene education program. A Health Education Sanitation Promotion (HESP) Program was introduced in 1983. The performance of this program could be improved through a better understanding of water use patterns in rural areas and determination of the bacteriological quality of water used for domestic purposes. It is particularly important to determine what, if any, deterioration occurs between the water supply source and consumption in the home. This study will provide this information to help improve the HESP program.

/water quality/ /water pollution/ /rural areas/ /pollution sources/ /health education/
Area under study: /Malawi/ .

Commitment Date: 1988-11-24 Est. Completion: 1990-11-24

Recipient(s): University of Malawi, MW
Researcher(s): Nyasalu, Y.M.Z.

IDRC Contribution: \$ 73740 CAD

Status: Active

3-P-88-0084

Schistosomiasis Transmission (Botswana)

Division: HS Programme: Tropical and Infectious Diseases /
Health and the Environment

In Botswana the prevalence of intestinal schistosomiasis in children in some communities has risen to as high as 80 percent in recent years. Through chemotherapy this prevalence is being reduced and the government is now planning the maintenance phase of its control program. It is recognized that morbidity control through chemotherapy alone is ineffective without a concordant strategy to reduce transmission. This project intends to elucidate aspects of the bionomics of snail intermediate hosts in Ngamiland which are relevant to effective planning of community based, integrated control of schistosomiasis. The project will identify and study the seasonal distribution of the intermediate hosts and their habitats. It will also study the schistosome infection rates in these intermediate hosts in the context of schistosomiasis transmission sites and correlate the infection rates in communities in relation to these transmission sites.

/schistosomiasis/ /disease control/ /disease transmission/
Area under study: /Botswana/

Commitment Date: 1988-10-05 Est. Completion: 1990-10-05

Recipient(s): University of Botswana. Department of Biology,
BW
Researcher(s): Raseroka, B.H.

IDRC Contribution: \$ 46043 CAD

Status: Active

3-P-88-0168

Risk Factors of Cutaneous Leishmaniasis (Costa Rica)

Division: HS Programme: Health and the Environment /
Tropical and Infectious Diseases

There has been increasing evidence that the incidence of cutaneous leishmaniasis in rural Costa Rican communities is escalating with lesions predominantly occurring in children. This changing pattern of transmission of leishmaniasis infection from the forest region to a domiciliary one is of great concern. This project seeks to generate information on some of the more significant environmental and community risk factors such as housing characteristics, the peridomiliary environment including sandfly vectors and animal reservoirs, and behavioral aspects particularly of children. Research will be undertaken in the rural country of Acosta.

/parasitic diseases/ /disease transmission/ /rural
communities/ /children/ /epidemiology/
Area under study: /Costa Rica/

Commitment Date: 1989-04-25 Est. Completion: 1992-04-25

Recipient(s): Universidad Nacional Escuela de Medicina
Veterinaria, CR
Researcher(s): Zeledon, Rodrigo
Researcher(s): Rojas, Julio

IDRC Contribution: \$ 280995 CAD

Status: Active

3-P-88-0171

East Africa Pesticide Network

Division: HS Programme: Health and the Environment /
Occupational Health and Environmental Toxicology

Pesticide exposure and resultant adverse health effects have not been adequately studied in East Africa. The purpose of this project is to assess the intensity of pesticide absorption and resultant health effects among approximately 2000 agricultural field workers in Kenya, Tanzania, and Uganda; and to assess knowledge, attitudes, and practices with regards to pesticide handling and use among these workers. Data will be obtained by field teams in each country by interviews of agricultural field workers and their health care providers through blood and urine specimens and by observations of pesticide handling and use, and the use of spraying and personal protective equipment. Results will be analyzed as a basis to develop measures to reduce pesticide poisoning and to develop recommendations for prevention and control of pesticide poisoning.

/pesticides/ /poisoning/ /occupational diseases/
/agricultural workers/ /health surveys/ /occupational safety/
Area under study: /East Africa/ /Kenya/ /Tanzania/ /Uganda/

Commitment Date: 1989-05-16 Est. Completion: 1992-11-16

Recipient(s): Kenya Medical Research Institute, KE

Recipient(s): Tropical Pesticides Research Institute, TZ

Recipient(s): Uganda. Ministry of Labour, UG
Researcher(s): Choudhry, A.W.
Researcher(s): Ngowi, A.V.F.

IDRC Contribution: \$ 852740 CAD

Co-funding Agencies:

Finnish Institute of Occupational Health
Funding: \$ 120000 CAD

Status: Active

3-P-88-0174

Epidemiology of HIV-1 and HIV-2 (Nigeria)

Division: HS Programme: Health and the Environment /
Tropical and Infectious Diseases

Nigeria has the lowest cumulative prevalence of AIDS (Acquired Immune Deficiency Syndrome) in the 87 countries reporting to WHO. There is, as yet, no clear cut epidemiological pattern in the country due to the small number of cases seen. Research is needed to provide data for strategic approaches to prevent or minimize the epidemic. This project will determine annually over five years the rates of HIV (human immunodeficiency virus) infections in cluster samples drawn from urban and rural population zones in the country. Annual incidence rates will also be monitored for cohort groups drawn from the same zones and from undergraduate freshmen. At the same time, the knowledge, attitudes, and practices (KAP) relating to AIDS, sexually transmitted diseases, and condoms will be assessed, and a continuing health education program emphasizing risk reduction techniques will be instituted for those in the cohort samples. Changes in HIV prevalence and KAP will be assessed and compared in cluster samples and in those cohorts receiving the intervention at two and four years into the study.

/AIDS/ /epidemiology/ /disease transmission/ /disease
control/ /health education/
Area under study: /Nigeria/

Commitment Date: 1989-07-24 Est. Completion: 1994-07-25

Recipient(s): Obafemi Awolowo University. Dept. of
Dermatology & Venereology, NG
Researcher(s): Soyinka, Femi

IDRC Contribution: \$ 964790 CAD

Co-funding Agencies:

Federal Centre for AIDS (FDC)

Status: Active

3-P-88-0177

Brugia Malayi (Indonesia) - Phase II

Division: HS Programme: Health and the Environment /
Tropical and Infectious Diseases

Filariasis is an insect borne zoonotic parasitic disease of great social, economic, and public health importance for Indonesia, particularly in connection with the transmigration program being implemented by the government. Phase I of this project was successful in determining the filariasis endemicity, some transmission factors, and treatment in transmigrant communities in Java island. Phase II will attempt to identify those socio-behavioural factors among the transmigrant populations in Kumpeh District, Jambi, that could be targetted for intervention by the Health Ministry and Transmigration Ministry so that the danger of acquiring filariasis could be minimized following the resettlement of communities.

/filariasis/ /disease transmission/ /resettlement/ /disease control/

Area under study: /Indonesia/

Commitment Date: 1989-02-21 Est. Completion: 1991-08-21

Recipient(s): Indonesia. Ministry of Health, ID
Researcher(s): Sudomo, Mohammed

IDRC Contribution: \$ 91670 CAD

Co-funding Agencies:

University of Indonesia

Status: Active

3-P-88-0186

Occupational Health and Rural Community Education (Peru)

Division: HS SS Programme: Occupational Health and
Environmental Toxicology / Health and the Environment /
Population, Education and Society

Pesticide intoxication is a major problem due to its severe toxic effects, the large number of people exposed to it, and the inadequacy of intervention models in the Third World. The objective of this project is to do research into the pesticide and defoliant intoxication of humans in agricultural occupations in the coastal valleys of Peru, and evaluate changes which may be brought about by education of the population and by the creation of an epidemiological monitoring system. Researchers will study exposure factors, practices, and knowledge in the use of pesticides; assess the prevalence of intoxication in humans; assess the accuracy and validity of pesticide self-diagnosis done by the farmers; design, implement, and evaluate, jointly with the farmers and their families, a health education program of safe pesticide use and self-diagnosis; develop and test a community-based pesticide epidemiological monitoring program; and study government policy related to the problem.

/pesticides/ /poisoning/ /farmers/ /diagnosis/ /health
education/ /epidemiology/ /social participation/
Area under study: /Peru/

Commitment Date: 1989-01-13 Est. Completion: 1993-01-13

Recipient(s): Huayuna Instituto de Promocion y Desarrollo, PE
Researcher(s): Rubin de Celis, Emma

IDRC Contribution: \$ 200000 CAD

Status: Active

3-P-88-0212

Environmental Control of Malaria (Nepal)

Division: HS Programme: Health and the Environment /
Tropical and Infectious Diseases

Malaria is hyperendemic in much of the foot-hill, forest, and terai regions of Nepal. The phased malaria eradication program started in 1959 in the country was unsuccessful and was changed to a control program in 1975. In addition to *Plasmodium vivax*, the previously predominant parasite, *P. falciparum* has also appeared with increasing frequency in the country. The situation is further aggravated by the parasite showing resistance to antimalarial drugs and the mosquito vectors to insecticides. This project will explore feasible bio-environmental methods of malaria control that will be suitable under local conditions and the implementation of which can be realized with community involvement. Researchers will assess the impact of chosen biological and environmental methods on the number of breeding sites, on the larval population and adult mosquito population, and on malaria transmission. Also researchers will evaluate the role of community participation in and make recommendations that will provide guidance on how and to what extent community involvement can be part of future control activities.

/malaria/ /disease vectors/ /epidemiology/ /disease control/
/environmental management/ /social participation/
Area under study: /Nepal/

Commitment Date: 1990-11-12 Est. Completion: 1993-05-12

Recipient(s): Nepal Malaria Eradication Organization, NP
Researcher(s): Shrestha, Shambhu Lall

IDRC Contribution: \$ 107231 CAD

Status: Active

3-P-88-0213

Biological Control of Malaria (Peru)

Division: HS Programme: Health and the Environment /
Tropical and Infectious Diseases

Reducing the incidence of malaria through vector control is now a major challenge in countries, such as Peru, where the disease assumes serious proportions in jungle and Amazonian areas. Rising costs, resistance of the insect vectors, and environment contamination have now forced exploration of alternative approaches to insecticide use. The use of safe and efficient biological control agents such as *Bacillus thuringiensis* var. *israelensis* H-14 (Bti) depends largely on costs and feasibility of production. The purpose of this project is development and field testing of a simple technique for optimal local production of Bti using coconut water as the medium. Additionally whole coconuts will be used as a convenient medium for inoculation of Bti by communities, and to facilitate transportation and application in different localities of the endemic region.

/malaria/ /biological control/ /insects/ /entomology/
/testing/

Area under study: /Peru/

Commitment Date: 1989-02-17 Est. Completion: 1990-08-17

Recipient(s): Universidad Peruana Cayetano Heredia, PE
Researcher(s): Ventosilla, Palmira

IDRC Contribution: \$ 49425 CAD

Status: Active

3-P-88-0214

Diagnosis of Dengue (Brazil)

Division: HS Programme: Health and the Environment /
Tropical and Infectious Diseases

Dengue virus reappeared in Brazil in April 1986 after a half century absence, and now more than two million new infections are estimated to have occurred, mainly along the coast. Diagnosis of Dengue fever requires laboratory support, which at present is available only in major centres. Furthermore, laboratory diagnostic methods available in the country are not able to provide rapid diagnosis important to identifying epidemic spread at an early moment and instituting preventive activities. A new approach to rapid viral diagnosis called IgM Capture ELISA has now been developed partly by the Brazilians who wish to field test this approach. This project will study the introduction of this methodology in ten regional public health laboratories in those states most vulnerable to Dengue epidemics. This will also provide an opportunity to study the dynamics of IgM serological responses in populations not previously exposed.

/infectious diseases/ /viruses/ /diagnosis/ /new technology/
/testing/

Area under study: /Brazil/

Commitment Date: 1989-01-30 Est. Completion: 1991-01-30

Recipient(s): Oswaldo Cruz Foundation, BR
Researcher(s): Schatzmayr, Hermann

IDRC Contribution: \$ 98030 CAD

Status: Active

3-P-88-0215

AIDS Diagnosis (PATH/Global) - Phase II

Division: HS Programme: Health and the Environment /
Tropical and Infectious Diseases

A phase I feasibility study supported the development of a prototype for a rapid immunodiagnostic test for Human Immunodeficiency Virus (HIV) infection designed to suit developing country application. This phase II project will improve and refine the test; conduct performance evaluation and field testing; and initiate technology transfer of the test production to selected developing countries. It is expected that the availability of such a test will remove a major impediment to HIV diagnostic and epidemiologic services and research in developing countries.

/AIDS/ /diagnosis/ /prototypes/ /product development/
/testing/
Area under study: /Global/

Commitment Date: 1989-03-06 Est. Completion: 1990-12-06

Recipient(s): PATH Canada, CA
Researcher(s): Tam, Milton R.

IDRC Contribution: \$ 244450 CAD

Co-funding Agencies:

Rockefeller Foundation
Funding: \$ 241800 CAD

Status: Active

3-P-88-0216

Community Control of Malaria (Colombia)

Division: HS Programme: Health and the Environment /
Tropical and Infectious Diseases

In Colombia, at least 70% of the population live in malarious areas and are largely unprotected by national malaria control programs. Anti-malarial drug resistance and insecticide resistance of the mosquito vectors have further exacerbated the problem of control. This project, to be carried out in isolated, rural Pacific coastal communities, will examine three strategies aimed at achieving sustainable control of malaria with minimal external assistance. Specifically, the study will evaluate the effectiveness, feasibility, and sustainability of a focused community education program; an early diagnosis and treatment plan combined with education; and an integrated vector control system with active involvement of the community conjoined with early diagnosis and treatment.

/malaria/ /disease control/ /evaluation/ /health education/
/primary health care/ /social participation/ /cost analysis/
Area under study: /Colombia/

Commitment Date: 1989-04-06 Est. Completion: 1991-10-06

Recipient(s): Corporación para Investigaciones Biológicas
(CIB), CO
Researcher(s): Rojas, William

IDRC Contribution: \$ 248878 CAD

Co-funding Agencies:

Patrulla Aereo Civil (PAC)
Centro Internacional de Educación y Desarrollo Humano (CINDE)

Status: Active

3-P-88-0230

Community Control of Acute Respiratory Infections (Cuba)

Division: HS Programme: Health and the Environment /
Tropical and Infectious Diseases

In Cuba there is a lack of accurate information on community distribution of illness due to "Acute Respiratory Infection" (ARI). The introduction of the new organizational model of primary health care in the country using "Family Doctors" has made it necessary to reorient case management as well as overall preventive and community control strategies. This project will measure ARI illness in the community and evaluate the feasibility of case management schedules and health education as control strategies. To achieve this, ARI episodes in the general population will be monitored by means of periodic household visits and daily surveillance by family doctors. The study sites will include four health areas of Havana City and one of Matanzas province. Expected outcomes will include improved recording and epidemiological surveillance, standardization of case management procedures, and extension of overall community intervention strategies.

/respiratory diseases/ /epidemiology/ /disease control/
/primary health care/ /health education/
Area under study: /Cuba/

Commitment Date: 1989-04-17 Est. Completion: 1992-04-17

Recipient(s): Instituto de Medicina Tropical "Pedro Kouri",
CU

Researcher(s): Ochoa, Edilberto

IDRC Contribution: \$ 152010 CAD

Status: Active

3-P-88-0246

Corneal Eye Infections (Nepal) - Phase II

Division: HS Programme: Health and the Environment /
Tropical and Infectious Diseases

Eye infection is the second most common cause of blindness in Nepal and affects primarily agricultural workers in rural communities. Phase I project determined the microbial etiology of post-trauma eye infections in the country and determined the optimal choice of antibiotic to which the majority of infectious agents were sensitive. Phase II will explore the community use of the selected prophylactic antibiotic for eye injuries seen at primary health care levels in rural areas. The general objective will be to determine if such an intervention, integrated with health education, can significantly reduce the incidence of visual impairment.

/eye diseases/ /blindness/ /rural areas/ /primary health
care/ /antibiotics/ /health education/ /evaluation/
Area under study: /Nepal/

Commitment Date: 1990-03-02 Est. Completion: 1994-03-02

Recipient(s): Tribhuvan University, NP
Researcher(s): Upadhyay, Madan P.

IDRC Contribution: \$ 286190 CAD

Status: Active

3-P-88-0247

Arsenic Contamination (Chile)

Division: HS Programme: Health and the Environment /
Occupational Health and Environmental Toxicology

The population of the desert region of north east Chile obtain drinking water from arsenic contaminated sources. The arsenic is leached out of volcanic materials naturally present in watershed areas in the Andes. Adverse health effects had been reported in the large urban centres prior to the building of arsenic removal plants in 1970 and 1978. However, there remains many small and dispersed communities in the altiplano region, which, because of their geographic isolation, are unlikely to obtain access to treated water. The inhabitants are poor and mainly of Aymara descent. Arsenic content of their water is well above internationally acceptable levels. This project to be undertaken in 12 altiplano communities will survey the knowledge of water sources, use, and dietary habits; conduct a preliminary clinical survey; determine the arsenic content of drinking water, foods, and soil; and study the efficacy and feasibility of a simple small-scale arsenic removal system.

/arsenic/ /drinking water/ /water pollution/ /water
treatment/ /household surveys/ /health surveys/
Area under study: /Chile/

Commitment Date: 1989-04-24 Est. Completion: 1991-04-24

Recipient(s): Universidad de Chile. Civil Engineering
Department, CL
Researcher(s): Sancha, Ana Maria

IDRC Contribution: \$ 297000 CAD

Co-funding Agencies:

Chile. National Health and Welfare
Funding: \$ 30000 CAD

Status: Active

3-P-88-0255 Malaria Surveillance (Brazil)

Division: HS Programme: Health and the Environment /
Tropical and Infectious Diseases

Malaria with its associated illness and death continues to be a major impediment for the development of large sections of Brazilian communities, particularly in the Amazon region. The number of reported cases in the country has drastically increased annually, to the point where surveillance, preventive, and control measures are no longer effective in the country. The objective of this project is to apply a microcomputer-based image information system for assessment of malaria in communities and provide decision making support for preventive/control measures. Research will be aimed mainly at the detection of malaria infection foci and presentation of prevalence/incidence data in a useful and readily usable format for planning of control strategies.

/malaria/ /disease control/ /epidemiology/ /data bases/
/microcomputers/ /electronic data processing/ /spatial
analysis/

Area under study: /Brazil/

Commitment Date: 1989-04-07 Est. Completion: 1991-04-07

Recipient(s): Universidade Federal do Rio de Janeiro, BR
Researcher(s): Nobre, Flavio F.

IDRC Contribution: \$ 86060 CAD

Status: Active

3-P-88-0256

Japanese Encephalitis (Thailand)

Division: HS Programme: Health and the Environment

Japanese encephalitis (JE) is an acute infection of the central nervous system caused by JE virus, transmitted to people by certain mosquitoes predominantly breeding in rice fields of South and South East Asia. Thailand is now producing the Nakayima JE vaccine which has demonstrated safety and efficacy in many endemic countries. The overall purpose of this project is to determine the target population for vaccination so that a mass immunization strategy can be developed for Thailand. Specifically, this study will gather data on the immune status to JE virus in children of selected communities in the northern part of the country. Researchers will examine the anti-JE virus antibody level of children under 14 years old in rural and urban areas in the region.

/infectious diseases/ /viruses/ /immunology/ /vaccination/
Area under study: /Thailand/

Commitment Date: 1989-03-13 Est. Completion: 1990-06-13

Recipient(s): National Institute of Health, TH
Researcher(s): Suntharee Rojanasuphot

IDRC Contribution: \$ 58150 CAD

Status: Active

3-P-88-0270

Research in Human Reproduction (Global) - Phase II

Division: HS Programme: Health and Environment

The World Health Organization's Special Programme of Research, Development and Research Training in Human Reproduction (HRP), one of the remaining few institutions engaged in contraceptive development, especially for public sector use, has continued to democratize its consultative and management structures and processes while expanding the concept of human reproduction to include "reproductive health". Drawing upon the skills and knowledge of scientists worldwide, HRP support the development, testing, introduction, and use of contraceptive technology. Much of the work supported is done in the developing world, by scientists from the developing world. Increasingly technology development is in the context of local needs and priorities. Great emphasis is being placed on training scientists in the developing world. In view of the importance of its work, and of IDRC's representation on some of its committees, this project will renew IDRC's contribution.

/contraceptives/ /research and development/ /organization of research/ /research capacity/ /contraception/ /family planning/

Area under study: /Global/

Commitment Date: 1989-04-13 Est. Completion: 1991-05-30

Recipient(s): World Health Organization (WHO), CH
Researcher(s): Barzelatto, José

IDRC Contribution: \$ 450000 CAD

Co-funding Agencies:

World Bank
UNFPA
IPPF

Status: Active

3-P-88-0273

Hydrams (Malaysia)

Division: HS Programme: Health and the Environment / Water Supply and Sanitation

In most developing countries, lack of funds to purchase fuel and spare parts for the maintenance of conventional water pumping systems is the main reason for their failure to provide an adequate water supply. Hydraulic ram pumps (hydrams) require no fuel and have only two moving parts. They are very simple to operate and maintain. In Malaysia, the Ministry of Health has installed 41 hydram schemes in easy access areas. Although there is a greater need for such hydrams in more remote areas, the difficulty of carrying the traditional hydrams which are bulky and heavy has discouraged more widespread use. A light-weight hydram which can be fabricated and assembled locally is required. In this project a computer model will be refined to optimize the hydram design. A laboratory investigation will be carried out to obtain data of hydram performance over a wide range of operating conditions to test the computer model. Based on the optimized design, a demonstration hydram pumping system will be installed on the campus of the University of Malaya. It is expected that phase II projects will be developed in a number of Asian and African countries to field test this design.

/pumps/ /water supply/ /engineering design/ /models/
/computer programmes/ /prototypes/ /testing/
Area under study: /Malaysia/

Commitment Date: 1989-07-17 Est. Completion: 1991-07-17

Recipient(s): University of Malaya, MY
Researcher(s): Goh Sing Yau

IDRC Contribution: \$ 72400 CAD

Status: Active

3-P-88-0275

Agro-based Wastewater (Thailand)

Division: HS FAD Programme: Health and the Environment /
Training for Project Development / Water Supply and
Sanitation

In Thailand, the government is very concerned with the pollution of local watercourses which are frequently used by rural populations for domestic water supply purposes. Since the country's economy is principally agriculturally based, agro-based industry generates large quantities of wastewaters. Operations such as slaughterhouses and piggeries generate wastes that contain high levels of pathogenic microorganisms which pose risks to human health, if left untreated. This project will explore the potential of a relatively novel cost-effective waste treatment technology which should reduce the risks to human health. The process is composed of an aquatic weed-sand-gravel waste treatment system that will treat agro-based wastewater and utilize harvested aquatic weeds to produce methane (biogas) and silage (animal feed) through a hybrid anaerobic process. If this pilot-scale project is successful, a phase II field-scale proposal will be prepared to address the operations and maintenance requirements as well as the utilization and marketability of the reclaimed biogas and silage.

/waste waters/ /animal wastes/ /waste treatment/ /waste
recycling/ /pilot projects/
Area under study: /Thailand/

Commitment Date: 1989-05-10 Est. Completion: 1991-11-10

Recipient(s): Asian Institute of Technology (AIT), TH
Researcher(s): Chongrak Polprasert

IDRC Contribution: \$ 132630 CAD

Status: Active

3-P-88-0327

Indoor Air Pollution (China)

Division: HS Programme: Health and the Environment /
Occupational Health and Environmental Toxicology

Indoor air pollution in residences originates primarily from fuel combustion during cooking and migration of outdoor pollutants. Indoor air pollution characteristics in China are quite different from those in developed countries. Because of the general layout of the kitchen in the floor plan, the chief source of air pollution in rooms are cooking related. Coal and coal "cakes" or "balls" are still widely used for cooking. In Shanghai, about 50% of the households are using coal cake stoves (CCS) without chimneys and unvented, resulting in high concentrations of suspended particulates and gases. This is a health problem affecting about 1 million families in the city. Switching to electricity or gas for cooking is not feasible in the near future. Use of ventilators to exhaust the polluted air might be useful in ameliorating indoor air pollution. This project will reduce the respiratory disease burden of Shanghai residents using coal-cake stoves through better understanding of the health impacts of indoor air pollution and through the use of ventilation devices to improve the air quality indoors.

/air pollution/ /air quality/ /cooling/ /living conditions/
/respiratory diseases/ /health surveys/ /health education/
/urban areas/
Area under study: /China/

Commitment Date: 1989-08-29 Est. Completion: 1992-08-29

Recipient(s): Shanghai Medical University, CN
Researcher(s): Hong, C.J.

IDRC Contribution: \$ 134480 CAD

Status: Active

3-P-88-0329

Byssinosis (China)

Division: HS Programme: Health and the Environment /
Occupational Health and Environmental Toxicology

In China, cotton production and the textile industry play a vital role in the national economy. Unfortunately though, various reports have suggested that byssinosis, a lung disease resulting from prolonged exposure to cotton dust, is a common problem in the country. However, because of various methodological problems in these reports, many of the important questions on the disease remain unanswered. This project will study the prevalence of byssinosis syndrome and its determinants in Guangzhou; and compare equipment and methods in dust measurement. Two factories will be selected for industrial hygiene measurements using total dust samplers and vertical elutriators. Bacteria, fungus, and endotoxin levels will also be measured. Researchers will study the prevalence of byssinosis syndrome in relation to levels of dustiness, duration of exposure, work processes, and other variables such as sex, age, tobacco smoking, etc.; and formulate recommendations for the protection of workers exposed to cotton dust in Guangzhou.

/occupational diseases/ /respiratory diseases/ /textile
industry/ /working conditions/ /occupational hygiene/
/measurement/ /occupational safety/
Area under study: /China/

Commitment Date: 1989-10-03 Est. Completion: 1991-10-03

Recipient(s): Guangzhou Occupational Disease Prevention and
Treatment Centre, CN
Researcher(s): Jiang Chao-Qiang

IDRC Contribution: \$ 114510 CAD

Co-funding Agencies:

University of Hong Kong
Funding: \$ 38000 CAD

Status: Active

3-P-88-0340

Community Water Treatment Systems (Colombia)

Division: HS Programme: Health and the Environment

In 1986, the government of Colombia initiated the decentralization of the water supply and sanitation sector. Under this program, the responsibility for construction, operation, and maintenance of water supply systems is being transferred to municipalities and community councils. As a result, low-cost mechanically simple water treatment systems, that can be managed by communities, have become not only desirable, but necessary. The Universidad del Valle (UNIVALLE) with the assistance of the International Reference Centre (IRC), at The Hague, has conducted research on slow sand filtration (SSF) treatment. This technology is well suited for many rural and peri-urban communities of Colombia. Due to efforts by UNIVALLE, several SSF systems have been installed and are being managed by communities in the Valle region. However, no field evaluation has been performed to date. This project will identify managerial and technical factors which facilitate and/or impede the successful adoption, operation, and maintenance of SSF treatment systems. The project will also develop and field-test a monitoring program aimed at community operators.

/water supply/ /sanitation/ /community development/ /water treatment/ /diffusion of innovations/ /maintenance and repair/ /administrative aspects/
Area under study: /Colombia/

Commitment Date: 1989-06-10 Est. Completion: 1990-09-10

Recipient(s): Universidad del Valle, CO
Researcher(s): Galvis, Gerardo
Researcher(s): Vargas, M. Garcia

IDRC Contribution: \$ 90760 CAD

Status: Active

3-P-88-0351

Occupational Health (Tanzania)

Division: HS Programme: Occupational Health and
Environmental Toxicology / Health and the Environment

Occupational health, especially in the large agricultural sector of developing countries, often receives a small degree of attention from health policymakers. This project will support a preliminary study of occupational health policy and practice in Tanzania using the sugar cane plantation industry as a model. A review will be made of the occupational health care delivery system using a case study approach.

Documentary research and interview methods will be employed. Individuals in government, union, and parastatal institutions as well as samples of workers will be interviewed. Available data on occupational illnesses and accidents will be analyzed. The outcome will be the refinement of survey instruments and research approach to this issue, and the elaboration of a comprehensive phase II project aiming at health systems analysis of broad-based occupational health policy in the country.

/occupational accidents/ /occupational diseases/
/occupational safety/ /sugar cane/ /plantations/ /health
policy/ /health services/ /health surveys/
Area under study: /Tanzania/

Commitment Date: 1989-05-25 Est. Completion: 1991-10-00

Recipient(s): University of Dar es Salaam, TZ
Researcher(s): Kamuzora, Peter

IDRC Contribution: \$ 13780 CAD

Status: Active

3-P-88-0363

Environmental Epidemiology (Latin America)

Division: HS Programme: Health and the Environment

Countries in the Andean region of Latin America are facing serious environmental risk due to growing industrialization and the increased use of agricultural chemicals. Furthermore, there is a lack of research capacity in this area in the region. This project will support a group training activity in environmental epidemiology. The training workshop and follow-up will provide both short-term intensive training in environmental epidemiology for 15 participants selected from seven countries, and some follow-up/coordination of data collection and analysis for worthy projects arising from the initial training experience. The initial training and the follow-up workshop on data analysis will be the principal responsibility of a faculty member from McGill University's Department of Epidemiology and Biostatistics in collaboration with the recipient institution. It is envisioned that the recipient institution will assume a major role in the coordination of this effort over the three-year period following the initial workshop.

/environmental effects/ /health surveys/ /epidemiology/
/research capacity/ /research projects/ /project design/
/training courses/
Area under study: /Latin America/

Commitment Date: 1989-05-15 Est. Completion: 1992-05-15

Recipient(\$): Secretaria Ejecutiva Permanente del Convenio
Andres Bello (SECAB), CO
Researcher(s): Ochoa Nunez, Hernando

IDRC Contribution: \$ 177634 CAD

Co-funding Agencies:

ECO

Funding: \$ 4300 CAD

Status: Active

3-P-88-0381

Measles Immunization (Philippines)

Division: HS Programme: Health and the Environment

Measles, a vaccine-preventable disease, still causes significant illness and death in many developing countries. The ineffectiveness of vaccine programs can be attributed to the onset of measles prior to immunization and poor coverage. Recent studies have suggested that an updated program of immunization employing a new vaccine at an earlier age will obviate these problems. In this project, a randomized controlled trial and cost-benefit analysis will be conducted in the Philippines to compare the proposed vaccine program (Zagreb vaccine at 6 months) to the current standard (Schwarz vaccine at 9 months). A total of 66 local health centres will participate. Costs and outcomes will be monitored; and cost-benefit analyses will be conducted to determine the relative effectiveness and efficiency of the two programs to guide decisions on the optimal age of and approach to immunization.

/measles/ /immunization/ /vaccines/ /testing/ /cost-benefit analysis/

Area under study: /Philippines/

Commitment Date: 1989-06-15 Est. Completion: 1991-06-15

Recipient(s): University of the Philippines, PH
Researcher(s): Tan-Torres, Tessa L.

IDRC Contribution: \$ 130620 CAD

Status: Active

3-P-88-0387

Ecology of Leishmaniasis (Colombia)

Division: HS Programme: Health and the Environment

Cutaneous leishmaniasis, with its considerable morbidity, poses an enormous problem of complexity and diversity in different regions of Colombia. This study is to be carried out in remote rural farming settlements of indigenous populations with evidence of high transmission of infection. The project will first set out to determine the prevalence and intensity of leishmaniasis in the community. Associated with these investigations will be ecological studies involving the sandfly vectors, animal reservoirs of infection, and the phyto-ecological profile of the region. The overall purpose will be to identify foci of transmission and determine environmental risk factors, so that relevant and feasible preventative/control measures can be targeted for the benefit of the affected communities.

/parasitic diseases/ /tropical diseases/ /epidemiology/
/rural areas/ /disease transmission/ /disease control/
/ecology/
Area under study: /Colombia/

Commitment Date: 1989-08-31 Est. Completion: 1991-08-31

Recipient(s): Universidad de Antioquia. Departamento de
Parasitologia, CO
Researcher(s): Velez, Ivan Dario

IDRC Contribution: \$ 92775 CAD

Co-funding Agencies:

Instituto Nacional de Salud
SSSA
Funding: \$ 33120 CAD

Status: Active

3-P-88-0391

Evaluation of Chagas' Disease Control (Brazil)

Division: HS Programme: Health and the Environment

Chagas' disease is a major public health problem throughout Latin America with at least 90 million people at risk and 16 to 18 million considered to be actually infected. Brazil has launched an integrated intervention program against the disease. The main facets of this program are vector control; health education; community involvement aimed at vector reduction; and house improvement, also aimed at elimination of vector breeding. This project will test simplified evaluatory methods for monitoring Chagas' disease infection level in a community following intervention. Specifically, the project will evaluate the success of community involvement; the effectiveness of insecticide application and house improvement on vector levels; and overall infection control through serological evidence for *T. cruzi*.

/parasitic diseases/ /disease transmission/ /disease control/
/evaluation/ /health education/ /insecticides/ /housing/
/community development/ /social participation/
Area under study: /Brazil/

Commitment Date: 1989-06-27 Est. Completion: 1992-06-27

Recipient(s): Universidade de Brasilia, BR
Researcher(s): Marsden, Philip D.
Researcher(s): Garcia-Zapata, Marco

IDRC Contribution: \$ 178010 CAD

Co-funding Agencies:

Brazil. Ministerio de Saude

Status: Active

3-P-88-0397

**Schistosomiasis Control: A Community-Based Approach
(Zimbabwe) - Phase II****Division: HS Programme: Health and the Environment**

Zimbabwe probably has one of the most successful rural water and sanitation supply programs in Africa, but there is no information on the impact that this program will have on diseases such as schistosomiasis. Phase I of this project resulted in the design and implementation of an integrated, community-based schistosomiasis control program within the primary health care system of an endemic area. Researchers implemented various combinations of community-constructed water and sanitation facilities; health education; and selective population chemotherapy. Phase II will evaluate the effect of these interventions on schistosomiasis transmission and infection. Incidence, prevalence, and intensity of infections in various communities will be monitored and compared with baseline data from the first phase. The project will also determine the longest acceptable interval between treatments required to control the illness. Finally, the project will determine the validity of linking schistosomiasis control to water and sanitation programs at the national level.

/schistosomiasis/ /disease control/ /disease transmission/
/sanitary facilities/ /water supply/ /medical care/
/children/ /evaluation/
Area under study: /Zimbabwe/

Commitment Date: 1989-08-03 Est. Completion: 1992-03-31

Recipient(s): Zimbabwe. Ministry of Health, ZW
Researcher(s): Chandiwana, Stephen

IDRC Contribution: \$ 193030 CAD

Status: Active

3-P-88-0403

HIV Transmission (Mexico)

Division: HS Programme: Health and the Environment

The purpose of this study is to determine and analyze the risk factors associated with heterosexual transmission of Human Immunodeficiency Virus (HIV) in Mexico City. This study will be conducted among heterosexual males and females who are sexual partners of HIV-positive subjects of three high risk populations: a population of professional blood donors in Mexico City; self-referred subjects who tested HIV-positive at the AIDS National Information Center; and AIDS patients treated at a major hospital in Mexico City. The study will examine the significance of heterosexual transmission in rapidly expanding marginal urban areas, and the epidemiologic implications for Mexico. Results will be essential in determining the nature of surveillance programs in the region and in planning the modes of infection control for HIV.

/AIDS/ /disease transmission/ /epidemiology/ /disease control/

Area under study: /Mexico/

Commitment Date: 1989-06-26 Est. Completion: 1992-06-26

Recipient(s): Mexico. Ministry of Health, MX

Researcher(s): Avila, Mauricio Hernandez

IDRC Contribution: \$ 224470 CAD

Status: Active

3-P-89-0029

Opisthorchiasis (Thailand)

Division: HS Programme: Health and the Environment

There are an estimated seven million cases of opisthorchiasis (liver fluke infection) in northeast Thailand. The Ministry of Health is under pressure to plan and execute a costly mass treatment approach to control the disease in that part of the country and has commissioned the Mahidol University to advise it on strategies. However, virtually all data on opisthorchis disease (compared with infection) is derived from hospital-based clinical studies rather than community-based morbidity studies. This project will determine the morbidity load at the community level by the combined application of new field techniques (sonography and antigen detection). The study will also determine whether community morbidity rates are reversible following chemotherapy. The outcome will be recommendations concerning the public health importance of opisthorchiasis and relative importance of attempting a control program by chemotherapy.

/parasitic diseases/ /morbidity/ /epidemiology/ /diagnosis/
/disease control/ /medicinal drugs/
Area under study: /Thailand/

Commitment Date: 1989-08-31 Est. Completion: 1992-02-28

Recipient(s): SEAMEO Regional Tropical Medicine and Public
Health Project (SEAMEO-TROPMED), TH
Researcher(s): Bunnag, Danai

IDRC Contribution: \$ 218260 CAD

Co-funding Agencies:

University of Calgary

Status: Active

3-P-89-0041

Anticonceptive Technology - NII (India) - Phase V

Division: HS Programme: Health and the Environment / Health and the Community

Current rates of population growth predict that India will surpass China as the world's most populous country within six decades. IDRC, along with other donors, has been supporting over the past 12 years the development in India of a contraceptive vaccine which will be safe, effective, reversible, and practicable. Remarkable progress has been achieved. Earlier phases proved the feasibility of the approach and developed first generation prototypic vaccines. The most recent phase conducted clinical safety trials, which proved successful. This fifth phase will conduct efficacy trials and explore more practical vaccine delivery systems. This phase will be the most critical in determining the future of this research.

/contraception/ /immunology/ /vaccines/ /medical research/
/testing/

Area under study: /Global/

Recipient(s): National Institute of Immunology, IN
Researcher(s): Talwar, G.P.

IDRC Contribution: \$ 698150 CAD

Status: Active

3-P-89-0089

Measles Immunization (Sudan)

Division: HS Programme: Health and the Environment

In the Sudan, one third of all deaths in children under three years of age are due to measles, despite the existence of a costly immunization program. This project will compare alternative immunization approaches to the approach commonly used in the country and elsewhere in the developing world. Either high-dose Edmonston-Zagreb measles vaccine or high-dose Connaught measles vaccine will be administered to infants at five months of age and compared with vaccination at nine months of age using standard dose Schwarz measles vaccine. Researchers will compare antibody response, protective efficacy, and cost-benefit of all three vaccine regimens. Particular emphasis will be placed on program costs and other cost implications of a change in vaccination policy that includes measles vaccination at an early age.

/measles/ /immunization/ /vaccines/ /comparative analysis/
/cost-benefit analysis/
Area under study: /Sudan/

Commitment Date: 1989-11-28 Est. Completion: 1991-11-28

Recipient(s): University of Khartoum. Department of
Pediatrics, SD
Researcher(s): Omer, Mohammed Ibrahim

IDRC Contribution: \$ 239870 CAD

Status: Active

3-P-89-0090

Leishmaniasis (Mexico) - Phase II

Division: HS Programme: Health and the Environment

Cutaneous leishmaniasis in the Yucatan region of Mexico is known as "Chiclero's Ulcer" and also as "Rotting Ear". Considerable disfigurement and hardship are associated with this condition and affects largely agricultural communities. Phase I of this project was a preliminary study aimed at assessing the extent and clinical nature of the infection in the community, and also at testing the validity of specific immunodiagnostic tests. Results were useful in highlighting the enormity of the problem to the government. Phase II will follow up on these early findings and will identify social, geographical, and ecological risk factors associated with acquiring the infections; and identify host and parasite factors that may play a role in infection and disease.

/tropical diseases/ /epidemiology/ /disease transmission/
/disease vectors/
Area under study: /Mexico/

Commitment Date: 1989-10-11 Est. Completion: 1992-04-11

Recipient(s): Universidad Autonoma de Yucatan. Department of
Immunology, MX
Researcher(s): Narvaez, Fernando Andrade

IDRC Contribution: \$ 110750 CAD

Status: Active

3-P-89-0100

Hepatitis B Immunization Strategy (Malaysia, Philippines, Korea)

Division: HS Programme: Health and the Environment / Health Research Systems

The recent development of effective vaccines against Hepatitis B virus (HBV) allows intervention strategies to be targeted to infants at birth. This project involving Malaysia, Philippines, and South Korea will determine the protective efficacy of HBV immunization when integrated into the differing regimes of national Expanded Programs of Immunization (EPI) to evolve a simplified vaccine delivery system suited to the individual countries. Approximately 19,000 pregnant women and 2,800 newborn infants of these mothers will be involved in the project. Since more than 50% of infants in Malaysia and the Philippines are born at home in remote areas, the operational problems of vaccine delivery and storage will be studied. In community based studies, infants will be vaccinated at birth and followed up to 36 months. Hospital based studies in Korea and Malaysia will screen pregnant mothers for hepatitis and infants of positive mothers will be immunized under different dose schedules to determine protective efficacy.

/infectious diseases/ /viruses/ /immunization/ /infants/
/vaccines/ /maternal and child health/ /health services/
Area under study: /Asia/ /Korea R/ /Malaysia/ /Philippines/

Commitment Date: 1990-04-16 Est. Completion: 1993-04-16

Recipient(s): Universiti Sains Malaysia. School of Medical Sciences, MY
Researcher(s): Das, P.K.

IDRC Contribution: \$ 452630 CAD

Status: Active

3-P-89-0118

Pediatric AIDS (Uganda) - Phase II

Division: HS Programme: Health and the Environment /
Tropical and Infectious Diseases

The Acquired Immune Deficiency Syndrome (AIDS) is becoming a serious public health issue in East Africa. Phase I of this project, undertaken in Uganda, produced important findings on the transmission of the disease from mother to newborn. Researchers examined the epidemiology of perinatal transmission of HIV (Human Immunodeficiency Virus) infection, and followed children for a two-year period post-partum. Phase II will continue to follow mother-child pairs throughout a further two-year period, thereby producing four years of continuous data. The extended period will allow the investigators to study illness and death patterns in children of women testing HIV positive, and the effect of subsequent child-bearing on the HIV status of both mother and child. Further study will also reveal the extent of protection against immunizable childhood diseases in children 2-4 years of age who are infected with HIV. The results will be important in developing recommendations for the prevention of AIDS in infants and children, and the management of AIDS cases in this young population.

/AIDS/ /virus/ /disease transmission/ /epidemiology/
/pregnancy/ /children/ /maternal and child health/
/immunization/

Area under study: /Uganda/

Commitment Date: 1990-01-18 Est. Completion: 1992-01-18

Recipient(s): Makerere University. Department of Pediatrics
and Child Health, UG
Researcher(s): Mworzi, E.A.

IDRC Contribution: \$ 105080 CAD

Status: Active

3-P-89-0124

Chloroquine Resistant Malaria (Guinea)

Division: HS Programme: Health and the Environment

Malaria is highly endemic in Guinea, which is among the poorest countries of the world. Concern for illness and death due to malaria in the country is further aggravated by growing evidence of increasing parasite resistance to treatment with chloroquine, the drug of choice. This project will determine the prevalence and seasonal distribution of chloroquine resistant malaria in the community. The study will also examine the availability and utilization practices of antimalarial drugs by the population. The study will be carried out through visits to selected households in representative regions of the country. Coded questionnaires will be used for interviews and "in vivo" drug sensitivity tests will be conducted according to World Health Organization guidelines.

/malaria/ /disease control/ /medicinal drugs/ /medical care/
Area under study: /Guinea/

Commitment Date: 1989-11-13 Est. Completion: 1991-11-13

Recipient(s): Guinée. Ministère de la Santé et de la
Population, GN
Researcher(s): Keita, Moussa

IDRC Contribution: \$ 107470 CAD

Status: Active

3-P-89-0125

Health Sciences Education Rehabilitation (Uganda)

Division: HS Programme: Health and the Environment / Health and the Community / Health Services Research

Makerere University has had a long standing relationship with IDRC and Canada. The University has decided that the rehabilitation of the Faculties of Health Sciences is a primary priority. At the same time, the University has reoriented its medical curriculum towards community oriented health services. This project will give long term institutional support to the University to rehabilitate its Faculties of Health Sciences. The University will become the East African focus of IDRC's Health Sciences Division's capacity building endeavours in subSaharan Africa. The program of support will also enable the Division to promote its research into educational systems for the production of appropriate health manpower and strengthen the network of community oriented health educational institutions. Support will be primarily for an Education and Research Unit and for strengthening the office of the Dean and is aimed at the implementation, monitoring, and evaluation of the community oriented medical curriculum.

/primary health care/ /medical education/ /paramedical personnel/ /vocational training/ /curriculum/ /universities/ /institution building/
Area under study: /Uganda/

Commitment Date: 1989-11-24 Est. Completion: 1993-11-24

Recipient(s): Makerere University, UG
Researcher(s): Mugerwa, J.

IDRC Contribution: \$ 1055500 CAD

Co-funding Agencies:

EEC
Rockefeller Foundation

Status: Active

3-P-89-0136

Botanical Molluscicide (ENDOD) Toxicology (Canada)

Division: HS Programme: Health and the Environment

Schistosomiasis is a debilitating disease afflicting over 300 million people in developing countries. Significant advances in diagnosis and chemotherapy have failed to result in sustainable control programs. It is recognized that such programs cannot be contemplated without integrating an additional component aimed at transmission interruption (e.g. control of the snail intermediate host). Berries from the African plant *Phytolacca dodecandra* (Endod) are known to have potent molluscicidal properties and hence may provide the missing component of community-based control programs. Before proceeding to community level studies of Endod use, its toxicological potential and environmental effects must be elucidated. This project will undertake testing in laboratories in Canada, the Netherlands, and Ethiopia to determine whether Endod is ecologically and toxicologically safe. Researchers will produce the internationally agreed standard extract ENDOSs and distribute samples to participating centres; conduct toxicity tests on selected small mammals; determine the eco-toxicity effects of ENDODs on common aquatic nontarget organisms; and compile data for registration review.

/schistosomiasis/ /disease control/ /biological control/
/plants/ /toxicity/ /testing/
Area under study: /Global/

Commitment Date: 1989-11-01 Est. Completion: 1990-11-01

Recipient(s): Carleton University. Department of Biology, CA
Researcher(s): Lambert, John D.H.

IDRC Contribution: \$ 126645 CAD

Status: Active

3-P-89-0146

Vector Blood Meals (Peru)

Division: HS Programme: Health and the Environment

In the Andean region of Peru, leishmaniasis is a significant cause of illness and hardship to communities. The project "Leishmaniasis (Peru)" (3-P-85-1043) highlighted the prevalence of the disease and is now examining approaches towards prevention/control in a proposed phase II project. However, comprehensive strategies are still hampered by the incomplete knowledge of the responsible sandfly vectors and their ecology in relation to transmission of the infection from certain animal reservoirs to people. This project will attempt to establish the animal sources of blood in the sandfly vectors of the area and also determine the sources of leishmanial infection rates using a recently refined technique.

/parasitic diseases/ /tropical diseases/ /disease vectors/
/disease transmission/ /leishmaniasis/
Area under study: /Peru/

Commitment Date: 1989-12-04 Est. Completion: 1991-06-04

Recipient(s): Universidad Peruana Cayetano Heredia, PE
Researcher(s): Perez, J. Enrique

IDRC Contribution: \$ 53831 CAD

Status: Active

3-P-89-0149

Onchocerciasis Control (Côte d'Ivoire)

Division: HS Programme: Health and the Environment

River blindness (onchocerciasis) is one of the most debilitating diseases of Africa. While the application of pesticides has successfully reduced the density of the insect vector in the savannas of West Africa, the approach is not considered to be practical in the populated forest zones, which are of enormous importance to agriculture. This project will attempt to break the cycle of insect vector - parasite - human host infection through mass treatment with a new drug Ivermectin. Researchers will assess the drug's effectiveness in reducing the transmission of onchocerciasis in the forested and small river abundant Danane region of Côte d'Ivoire. Specifically, it will evaluate the distribution (i.e. prevalence and density) of microfilaria before the inception of treatment and at different intervals after treatment. It will also estimate the costs of a treatment campaign using Ivermectin. The results of the project will enable the government to implement new strategies to reduce the risk of onchocerciasis, and open up new regions for agriculture.

/onchocerciasis/ /disease control/ /medicinal drugs/ /disease vectors/ /disease transmission/
Area under study: /Côte d'Ivoire/

Commitment Date: 1989-12-18 Est. Completion: 1991-12-18

Recipient(s): Institut Pierre Richet, CI
Researcher(s): Traore, Soungalo
Researcher(s): Diarrassouba, Soumana

IDRC Contribution: \$ 145080 CAD

Co-funding Agencies:

Côte d'Ivoire. Ministère de la santé publique

Status: Active

3-P-89-0150

Acute Respiratory Infections (Nepal)

Division: HS Programme: Health and the Environment

Acute respiratory infections (ARI) have been established as the leading cause of illness and death in children under five years of age in Nepal. However, reliable information concerning the common causative organisms and their sensitivity to antimicrobial drugs is not available. This is one reason why an effective preventive treatment plan against ARI is still not in place in the country. This project will identify the specific causative organisms in severe ARI in the 0-5 age groups; determine the sensitivity pattern of the bacteria; correlate the clinical picture with the organisms; and identify risk factors. The project will also develop laboratory research expertise at the Institute of Medicine, aided by collaboration with Mahidol University in Bangkok and the University of Calgary in Canada.

/respiratory diseases/ /bacteria/ /viruses/ /disease
transmission/ /diagnosis/ /tests/ /institution building/
Area under study: /Nepal/

Commitment Date: 1990-11-21 Est. Completion: 1992-11-21

Recipient(s): Tribhuvan University. Department of Paediatrics
, NP

Researcher(s): Sharma, Pushpa

Researcher(s): Adhikari, Ramesh

IDRC Contribution: \$ 103630 CAD

Status: Active

3-P-89-0156

Insecticide Resistance Detection (Cuba)

Division: HS Programme: Health and the Environment

Insecticides continue to be the mainstay of vector-borne disease control programs. However, the steady development of resistance to an increasing number of insecticides by an increasing number of vector species over wider geographical areas has impeded these control programs in many countries. Until recently, the usual means of detecting insecticide resistance has been by elaborate bioassay methods, which are now being reconsidered by biochemical, immunological, and nucleic acid probe resistance detection assays. This project will field test a simplified, rapid test for detecting organophosphate resistance in mosquitoes. Specifically, the project will compare the performance of the standard, World Health Organization (WHO) bioassay test with a filter-paper based enzyme assay test on individual insects under field conditions in Cuba.

/disease control/ /disease vectors/ /insecticides/ /field
research/ /tests/ /comparative analysis/
Area under study: /Cuba/

Commitment Date: 1990-01-25 Est. Completion: 1991-07-25

Recipient(s): Instituto de Medicina Tropical "Pedro Kouri"
(IPK), CU

Researcher(s): Bisset Lazcano, Juan

Researcher(s): del Carmen Marquetti, Maria

IDRC Contribution: \$ 25500 CAD

Status: Active

3-P-89-0161

Household Water Disinfection (Thailand)

Division: HS Programme: Health and the Environment

In Thailand, approximately 80% of the population lives in some 56,000 rural villages. The Ministry of Public Health has estimated that, even though 85% of the rural population have ready access to water year round, only 15% of the water sources were safe for drinking purposes. This project will develop chlorine cubes for the disinfection of shallow well water in rural areas. The cubes will be developed and tested under laboratory conditions and in pilot shallow wells. They should be able to maintain an effective chlorine residual concentration of between 0.2 to 0.5 parts per million. Operational guidelines will be developed. Recommendations for field testing and use will be formulated.

/drinking water/ /wells/ /water treatment/ /chlorine/ /field research/ /testing/
Area under study: /Thailand/

Commitment Date: 1990-03-07 Est. Completion: 1992-03-07

Recipient(s): King Mongkut's Institute of Technology, TH
Researcher(s): Udorn Charuratana
Researcher(s): Ratana Jiraratananon

IDRC Contribution: \$ 46820 CAD

Status: Active

3-P-89-0169

Slow Sand Filtration (Egypt)

Division: HS Programme: Health and the Environment

There are many rural communities in Egypt that are faced with the need to construct and operate water treatment facilities. Needed are simplified treatment systems that require a minimum level of operator skill, yet provide acceptable levels of treated water quality. The slow sand filter is an unsophisticated water treatment process. This project will develop the preliminary design for a slow sand filtration water treatment system, for improving the production of microbiologically safe and cercariae-free water for use and consumption in small communities. Measures to control the growth of algae in the system will also be investigated. Operational guidelines for the system will be developed and a cost-analysis will be carried out, comparing the operating costs of the slow sand filtration system with those of the rapid sand filtration systems currently in common use.

/water treatment/ /rural areas/ /appropriate technology/
/engineering design/ /water quality/ /comparative analysis/
/cost analysis/
Area under study: /Egypt/

Commitment Date: 1990-03-04 Est. Completion: 1992-09-04

Recipient(s): El-Mansoura University. Civil Engineering
Department, EG
Researcher(s): Fadel, Ahmed

IDRC Contribution: \$ 112920 CAD

Status: Active

3-P-89-0171

Peri-Urban Sanitation (Lesotho)

Division: HS Programme: Health and the Environment

"Mini tanker" equipment has been ordered for pit emptying in two district towns in Lesotho. The Urban Sanitation Improvement Team (USIT) propose to undertake field tests and write a detailed report. This project will look closely at the specifications required for the practical operation, maintenance, and economics of running a pit latrine emptying service. Researchers will examine the suitability of the equipment for the urban, peri-urban, and squatter areas in the country; and make suggestions as to its potential application in other countries. The research will be scheduled to take twelve months. Nine months of practical testing, and three months for analyzing data and writing up the report. The work will be done by the existing USIT team.

/toilets/ /waste disposal/ /sanitation services/ /urban areas/ /equipment/ /testing/ /appropriate technology/
Area under study: /Lesotho/

Commitment Date: 1990-02-27 Est. Completion: 1991-02-27

Recipient(s): Lesotho. Ministry of Interior, LS

Researcher(s): Ramonaheng, M.

Researcher(s): Blackett, I.

IDRC Contribution: \$ 9820 CAD

Status: Active

3-P-89-0180

Roughing Filters (Colombia)

Division: HS Programme: Health and the Environment

The development and promotion of low cost, mechanically simple water treatment systems that can be managed by communities have become necessary if the decentralization of the water supply and sanitation sector in Colombia is to succeed. Studies have been conducted on both pretreatment and treatment alternatives for surface waters. Among pretreatment alternatives, laboratory and pilot scale experimental studies have shown roughing filtration to be a simple and inexpensive method for the removal of suspended solids in surface waters of high turbidity. This pretreatment technology is important as it increases the potential application of slow sand filters (SSF) for the treatment of many rural and peri-urban water supplies of the country. This project will optimize hydraulic cleaning techniques of roughing filters and develop guidelines for their efficient operation and maintenance.

/water treatment/ /equipment/ /maintenance and repair/
/hydraulic engineering/ /testing/ /manuals/ /appropriate
technology/

Area under study: /Colombia/

Commitment Date: 1990-03-28 Est. Completion: 1992-06-12

Recipient(s): Universidad del Valle, CO
Researcher(s): Galvis, Gerardo

IDRC Contribution: \$ 67580 CAD

Status: Active

3-P-89-0209

Rainwater Catchment (Bangladesh)

Division: HS Programme: Health and the Environment

In rural Bangladesh, water from ponds, rivers, and hand-dug wells is used for drinking and other domestic purposes. Such sources are often contaminated from surface sanitary facilities resulting in considerable ill health. Tubewells cannot be used in many parts of the country because of cost, soil conditions, salinity, and low water tables in the dry season. Better advantage of the tropical monsoons could be taken if rainwater could be collected and stored effectively. This project will study the continuous supply of drinking water from rainwater catchment in three project sites selected according to need considering water table, soil conditions, availability of water, and sociocultural practices. Technical performance, economics, and acceptability of the system will be analyzed. The ultimate aim of the research is to develop and demonstrate an appropriate rainwater catchment system for rural conditions where tubewells are not feasible.

/rain/ /water supply/ /water storage/ /rural areas/
/appropriate technology/ /social surveys/
Area under study: /Bangladesh/

Recipient(s): Bangladesh Agricultural University. Department
of Farm Power and Machinery, BD
Researcher(s): Hussain, Daulat

IDRC Contribution: \$ 136510 CAD

Status: Active

3-P-89-0211

Gravel Water Filtration Systems (Jordan)

Division: HS Programme: Health and the Environment

In Jordan, there are five wastewater stabilization pond treatment plants (WSP). Although they are efficient in producing effluents that satisfy WHO Guidelines, a number of fluctuations in bacterial die-off have been experienced from time to time. As a result, The Ministry of Health has required effluent chlorination during these periods. Effluent chlorination produces undesirable by-products of public health significance and should be avoided if an alternate treatment process can be developed. This project will investigate the variability of rock and/or gravel filters in upgrading effluent quality to satisfy Ministry requirements and at the same time, be able to reduce effluent algae levels, allowing for a more efficient use of the effluent for various community purposes including drip-irrigation, a system utilized by low income farmers due to limited water resources. The study will also compare the WSP plus a rock and gravel filter with a trickling filter plus chlorination and polishing lagoon as to their respective treatment efficiencies and overall costs.

/waste waters/ /water treatment/ /equipment/ /technical aspects/ /water quality/ /water reuse/ /irrigation/ /comparative analysis/
Area under study: /Jordan/

Commitment Date: 1990-02-04 Est. Completion: 1992-08-04

Recipient(s): Royal Scientific Society (RSS), JO
Researcher(s): Ramadan, S.

IDRC Contribution: \$ 102000 CAD

Status: Active

3-P-89-0216

Community Prevention Of Malaria (Tanzania)

Division: HS Programme: Health and the Environment

In 1988, malaria accounted for 2.5 million deaths and 489 million clinical cases in the developing world, and an enormous loss of resources and productivity. The prospects for malaria control implemented by international and national efforts are more elusive now than ever before. There have been promising results from community trials of insecticide treated mosquito bed nets, which result in mass protection from malaria. However, in most malarious regions, the cost of bed nets is beyond the resources of the population. This project will test the original and practical idea of using polypropylene fibres from locally available sacking material made for agricultural products, to make "grass skirt" style impregnated bed curtains. The project will compare interventions in three communities, one with impregnated bed nets, one with impregnated bed curtains, and one with conventional control, in terms of reduction of clinical malaria episodes, vector transmission indices, durability of materials, acceptability of the measures by the population, and relative costs.

/malaria/ /disease control/ /disease vectors/ /appropriate technology/ /social participation/ /comparative analysis/
Area under study: /Tanzania/

Commitment Date: 1990-06-22 Est. Completion: 1993-06-22

Recipient(s): National Institute of Medical Research, TZ
Researcher(s): Magesa, Stephen

IDRC Contribution: \$ 169006 CAD

Status: Active

3-P-89-0235

Tropical Knapsack Sprayer (Malaysia)

Division: HS Programme: Health and the Environment

In Malaysia, more than 80% of the users of pesticide sprayers are still using the same model designed 40 years ago. More than 300,000 units of these locally-made sprayers are sold annually, but most of these have been shown to be of inferior design in terms of efficiency and safety to the users. This project will develop a hand-operated pesticide knapsack sprayer that is safer, more efficient and affordable, and which can be manufactured locally in developing countries. The study will investigate the current use and range of knapsack sprayers in the region, and examine the status of sprayer manufacturing in Malaysia. A local standard for design specifications that incorporate safety features will be established, following which prototype models will be developed and tested. It is proposed that the prototype will undergo field trials at a subsequent phase in neighbouring countries in the region.

/pesticides/ /equipment/ /product safety/ /product
development/ /engineering design/ /standards/ /prototypes/
Area under study: /Malaysia/

Commitment Date: 1990-07-20 Est. Completion: 1992-07-20

Recipient(s): Malaysian Agricultural Research and Development
Institute (MARDI), MY
Researcher(s): Jusoh Mamat, Mohammed

IDRC Contribution: \$ 94700 CAD

Status: Active

3-P-89-0244

Occupational Health and Safety in Cotton Industry (Uganda)

Division: HS Programme: Health and the Environment /
Occupational Health and Environmental Toxicology

The cotton industry is of major economic importance to Uganda, but is being troubled by a poor health and safety record. This study will evaluate the contributing factors and develop measures for their prevention and/or control. Ten cotton ginneries and three textile mills will be surveyed; and 500 cotton ginnery, 500 textile workers, and a control group of 200 other workers will be studied. A survey of selected workplaces will obtain information about safety and accidents. Dust and noise measurements will be made. A medical history will be completed, and lung function and other tests performed. The significance of correlations between accident/health effects and environmental factors will be tested. Accident and health hazard prevention measures will be developed, and implemented nationwide.

/cotton industry/ /occupational safety/ /working conditions/
/health conditions/
Area under study: /Uganda/

Commitment Date: 1990-05-29 Est. Completion: 1992-05-29

Recipient(s): Uganda. Ministry of Labour, UG
Researcher(s): Otim-Ogwal, J.C.

IDRC Contribution: \$ 195700 CAD

Status: Active

3-P-89-0247

High Altitude and Mining (Peru)

Division: HS Programme: Health and the Environment /
Occupational Health and Environmental Toxicology

Mining is one of the most important economic activities in Peru. A large proportion of mines (copper, silver, lead) are located in the Andean highlands of the country. Previous studies have revealed the adverse living and health conditions of the mining population of the Peruvian Andes, and the existence of physiological disturbances associated with high altitudes. This project, to be carried out for a period of 18 months in Cerro de Pasco, a mining district located at 4,300 meter above the sea level, will assess the health status of the population; suggest social, cultural, and occupational factors that may be involved in the development of unsatisfactory health conditions; and give suggestions to the appropriate government, private, and labour union institutions as well as to the International Labour Organization (ILO) to generate guidelines for improved health and sanitary programs. New, in-depth information about the physiological aspects of adaptation to high altitudes will be generated.

/mining/ /Andean region/ /miners/ /health conditions/
/physical environment/ /altitude/
Area under study: /Peru/

Commitment Date: 1990-02-23 Est. Completion: 1991-08-23

Recipient(s): Universidad Peruana Cayetano Heredia, PE
Researcher(s): Arregui, Alberto

IDRC Contribution: \$ 146445 CAD

Status: Active

3-P-89-0270

Ecological, Social and Health Assessment (Mexico)

Division: HS Programme: Health and the Environment

Studies on the health of communities, with few exceptions, tend to focus individually on the occurrence of disease among specific target groups, the role of environmental agents, personal and community behaviour or on various aspects of the health care delivery system. Integrated, holistic or ecologic approaches to the study of the health and well-being of communities rarely emerge as research subjects from developing countries. This project will constitute the preparatory phase of a proposed longer term project, and will consist of activities designed to study and involve the community itself and to generate preliminary information on the predominating forces affecting the state of health and well-being of the Mayan people in Yucatan. The objective of this phase is to attain a level of understanding of the community and its environment, such that the researchers could narrow down the focus of the subsequent detailed study to the most critical ecological, social, and health issues in the community. The project will also examine ways and means of actively involving the community in the planning, design, and execution of the proposed phase II study.

/living conditions/ /health conditions/ /ecosystems/
/evaluation/ /health planning/ /community development/
/social participation/
Area under study: /Mexico/

Commitment Date: 1990-06-13 Est. Completion: 1991-04-30

Recipient(s): Universidad Autonoma de Yucatan, MX
Researcher(s): Ortega, Judith
Researcher(s): Dickinson Barnach, Federico

IDRC Contribution: \$ 62000 CAD

Co-funding Agencies:

Centro de Investigaciones y de Estudios Avanzados del
Instituto Politecnico Nacional (CINVESTAV)

Status: Active

3-P-89-0289

Pyrethroid Poisoning (China) - Phase II

Division: HS COMM Programme: Health and the Environment /
Dissemination and Utilization of Research Results

Acute intoxication following occupational exposure to pyrethroid pesticides was reported for the first time in China in 1982, when several outbreaks occurred among pesticide sprayers in the cotton growing areas. This prompted a comprehensive study under phase I of this project of the prevalence, causal factors, and the exposure response relationships. Indicators, for use in biological monitoring of exposure, were also identified. Field observations revealed many unsafe handling and spraying practices. Relatively simple changes in these procedures are likely to reduce the severity of the potential risks to health. This second phase will further examine the biological monitoring findings; inform farmers about the results of the research carried out in phase I; and instruct them in the safe handling and use of pesticides. It is proposed to develop and distribute display (posters) and reading (pamphlets) materials, and to develop video display presentations. Training courses will be organized for farmers, plant protection technicians, and village health personnel. Personnel will be trained as trainers.

/pesticides/ /poisoning/ /toxicity/ /agricultural workers/
/occupational safety/ /information dissemination/ /training/
Area under study: /China/

Commitment Date: 1990-10-05 Est. Completion: 1992-10-05

Recipient(s): Chinese Academy of Preventive Medicine, CN
Researcher(s): Fengsheng He

IDRC Contribution: \$ 80742 CAD

Status: Active

3-P-89-0290

Ecology of Leishmaniasis Infection (Jordan)

Division: HS Programme: Health and the Environment

Leishmaniasis, with its associated illness, human suffering, and hardship to communities, remains one of the least studied and least understood of the major insect-borne parasitic diseases. With increased population mobility (including migration, nomadism, and refugees) in the Middle East, there has been mounting evidence that the incidence of cutaneous leishmaniasis is escalating. Currently, Jordan is attaching high priority toward formulating feasible plans for a prevention/control strategy for leishmaniasis in the country so that the inflow and spread of infection is arrested. This project will generate information on the magnitude of the problem in the country, its geographic distribution, and general prospective ecological data on transmission of infection in the community. It is anticipated that study results will lead to measures for curbing the spread of infection within the community and in the surrounding areas.

/leishmaniasis/ /epidemiology/ /disease transmission/
/ecology/ /disease control/ /questionnaires/ /data analysis/
Area under study: /Jordan/

Commitment Date: 1990-04-17 Est. Completion: 1993-04-17

Recipient(s): University of Jordan. Department of Community
Medicine, JO
Researcher(s): Khoury, Sami

IDRC Contribution: \$ 146600 CAD

Status: Active

3-P-89-0320

Development of Microbiological Water Quality Testing Capability

Division: HS OPE Programme: Health and the Environment

Maintaining a drinking water quality monitoring system in Canada's North is uniquely difficult. Contributing factors include: distance from laboratory facilities, variable means of transport, and time delays in receiving samples in satisfactory condition and reporting results. The variable quality of the results, inability to introduce timely remedial measures, and reduced cost-efficiency of current monitoring programs are among potentially serious problems. This project will assess the technical feasibility of introducing a simple, rapid, low-cost water quality monitoring system and delegating the responsibility for its operation and maintenance to the Split Lake Band of First Nations. A small laboratory will be established; local expertise will be developed; the performance of the monitoring tests under northern environmental conditions will be assessed; and a monitoring protocol will be developed.

/drinking water/ /water quality/ /testing/ /bacteriology/
/tests/ /training/ /indigenous population/ /know-how/
Area under study: /Canada/

Commitment Date: 1990-05-07 Est. Completion: 1992-05-07

Recipient(s): Split Lake Cree Nations, CA

Recipient(s): National Water Research Institute, CA
Researcher(s): Spence, Victor
Researcher(s): Dutka, B.J.

IDRC Contribution: \$ 29500 CAD

Status: Active

3-P-89-0330

Rainwater Catchment (Tanzania)

Division: HS Programme: Health and the Environment

The target set by the government of the Republic of Tanzania to provide safe and accessible drinking water to all by 1991 will not be achieved, due primarily to a lack of financial resources to develop new and rehabilitate existing water delivery systems. The next 5-year plan promotes the exploitation of rainwater as an adjunct to surface and groundwater sources. However, little is known about the use of rainwater catchment systems in the country, nor the socioeconomic factors that affect their acceptance, use, and correct maintenance. This project will investigate current knowledge, attitudes, and practices (KAP) with regard to rainwater collection; storage and use; microbiological quality; and the economics of rainwater collection/storage systems. The overall goal will be to provide technical and socioeconomic data for the development of a campaign to promote the construction, use, and correct maintenance of such systems.

/drinking water/ /water supply/ /rain/ /water storage/
/surveys/ /water quality/ /technical aspects/ /engineering
design/ /appropriate technology/
Area under study: /Tanzania/

Commitment Date: 1990-05-08 Est. Completion: 1991-11-08

Recipient(s): Centre for Housing Studies, TZ
Researcher(s): Chaggu, E.J.

IDRC Contribution: \$ 45450 CAD

Status: Active

3-P-89-0334

Hierarchy of Risk Factors in Childhood Pneumonia (Brazil)

Division: HS Programme: Health and the Environment

Young children in developing countries must cope with an environment that predisposes them to acute lower respiratory tract infections (ALRI). These infections constitute a major source of mortality and cause 25-30% of all deaths in children under five years of age (approximately 5 million deaths annually). Of this mortality, pneumonia is the most important cause. Many biological and behavioural issues critical to developing effective primary prevention strategies are not understood. Using a case-control design, this project will examine the known and suspected risk factors for pneumonia and establish the hierarchy of relative risks. This will form the basis for determining the nature, feasibility, and status of primary prevention of pneumonia in young children in poor urban populations of northern Brazil. The results will be of immediate importance in the development of preventive programs and the identification of high-risk groups to target interventions more effectively. Results may also serve to focus future research efforts on the risk factors of greatest importance.

/pneumonia/ /children/ /epidemiology/ /low income/ /urban areas/ /prophylaxis/

Area under study: /Brazil/

Recipient(s): Universidade Federal de Pelotas, BR
Researcher(s): Fonseca, Walter V.C.

IDRC Contribution: \$ 120000 CAD

Status: Active

3-P-89-0339

Study of the HIV Infection Risks in Benin

Division: HS Programme: Health and the Environment / Health and the Community

The main objective of Benin's national AIDS control program is the prevention of HIV infection transmission through the development of information, education, and communication activities. This project will provide a better knowledge of the risk factors of AIDS transmission. The mechanism of HIV1 and HIV2 virus transmission being well known, the project will compare 100 seropositive patients to 300 seronegative controls to test the hypothesis that the risk factors and cofactors found in patients are not extant in the controls. A further hypothesis to be tested is that the factor/cofactor distribution is the same for the more virulent HIV1 as for the weaker HIV1 virus. The researchers will be MDs who obtained their degrees with theses on AIDS. The project will build and strengthen Benin's research capacity.

/AIDS/ /risk/ /epidemiology/ /disease transmission/ /disease control/ /research capacity/ /capacity building/
Area under study: /Benin/

Recipient(s): Université Laval. Département de médecine
sociale et préventive, CA
Researcher(s): Catraye, Joseph

IDRC Contribution: \$ 6450 CAD

Status: Active

3-P-89-1012

Botanical Pesticides (Ottawa/Thailand/UBC)

Division: AFNS HS Programme: Crop Production Systems /
Health and the Environment

There is considerable concern about the health, environmental, and biological effects of chemical pesticides. Pesticides derived from plants offer a possible safer alternative. This project centred at the Research Centre for Natural Products, Chiang Mai University, Thailand will collect and identify promising plants; extract and test insecticidal/antifeedant action against major insect pests and human disease vectors; isolate and characterize active ingredients; determine mode of action; and test toxicity on aquatic organisms, mammals, and beneficial insects. Large-scale extraction, synthesis or structural modification will be carried out with promising compounds, which will then be assessed on farmers' fields for cost effectiveness. Canadian collaborators at University of Ottawa and University of British Columbia will assist in specialized training. This project will link closely with IDRC-supported projects in the Philippines and possible activities in China and Laos.

/pest control/ /biological control/ /insecticides/ /plants/
/toxicity/ /testing/
Area under study: /Thailand/

Commitment Date: 1989-11-22 Est. Completion: 1991-07-31

Recipient(s): University of Ottawa, CA

Recipient(s): Chiang Mai University, TH
Researcher(s): Philogene, Bernard J.R.
Researcher(s): Pichaet Wiriyachitra

IDRC Contribution: \$ 419600 CAD

Co-funding Agencies:

Prince of Songkla University
Silaporn University
Mahidol University

Status: Active

3-P-90-0026

Coliphage Field Kit (Malaysia) - Phase II

Division: HS Programme: Health and the Environment -- Water and Water Use

In 1985, IDRC began to support research on the development and testing of inexpensive microbiological water quality tests suitable for use in developing countries. Phase I of this project looked at the adaptation of the APHA 919C test for coliphage detection (coliphage test) to Malaysian conditions, and compared it with other bacteriological tests, including the standard tests for total and faecal coliforms. The latter period of research was directed at modifying the coliphage test for field application, including the development of a portable field kit. The project demonstrated that the coliphage test is a reliable method for determining the microbiological quality of drinking water, under Malaysian conditions, and has the potential for wide-scale application in developing countries. The next step in the research is the continued refinement of the coliphage field kit especially with respect to modifying its design for mass production. The improved model (to be designated Mark I) will be field-tested in this phase II project to assess its robustness, ease of use, and reliability. A field manual will be prepared; and training provided.

/drinking water/ /water quality/ /tests/ /water pollution/
/bacteriology/ /product development/ /training/ /manuals/
Area under study: /Malaysia/

Commitment Date: 1990-12-14 Est. Completion: 1993-12-14

Recipient(s): University of Malaya. Department of
Microbiology, MY
Researcher(s): Wang Chee Woon

IDRC Contribution: \$ 166310 CAD

Co-funding Agencies:

Malaysia. Ministry of Science, Technology and Environment

Status: Active

3-P-90-0032

Pesticide Intoxication (Egypt) - Phase II

Division: HS Programme: Health and the Environment /
Occupational Health and Environmental Toxicology

Use of pesticides in agriculture is critical to the economic development of Egypt. It has resulted in the stabilization and protection of crops; increased production; and additional economic benefits to millions of small farm workers. However, the health and safety of agricultural workers and their families are at risk. Special measures, including educational packages are required to ensure their safety. This project will attempt to demonstrate the need for these measures in the growing of the cotton crop. The project is a second phase of a successful first study that revealed serious health effects of pesticide exposure on workers in the pesticide manufacturing and formulating industries. Researchers in this project will determine and monitor the health of agricultural workers and their families during the application of pesticides; and will introduce a simple health monitoring system with the active involvement of village primary health care workers.

/pesticides/ /poisoning/ /occupational diseases/
/agricultural workers/ /cotton/ /plant production/ /health
education/

Area under study: /Egypt/

Commitment Date: 1990-07-30 Est. Completion: 1993-07-30

Recipient(s): University of Cairo. Department of Industrial
Medicine, EG

Researcher(s): Amr, Mahmoud M.

IDRC Contribution: \$ 197590 CAD

Status: Active

3-P-90-0078

Neurocysticercosis Control (Mexico)

Division: HS Programme: Health and the Environment / Health and the Community

Commitment Date: 1991-03-05 Est. Completion: 1993-09-05

Recipient(s): Mexico. Ministry of Health, MX
Researcher(s): Sarti, Elsa J.

IDRC Contribution: \$ 267830 CAD

Co-funding Agencies:

Universidad Nacional de Autonomia
Colegio de México

Status: Active

Human neurocysticercosis, a life threatening disease with high socio-economic significance, is recognized as a major zoonotic public health problem in several developing countries. It is caused by invasion of the central nervous system by tape worm larvae (cysticerci) which enter the host on ingestion of tapeworm eggs present in the environment of human populations infected with the pork tape worm. These human tape worm infections themselves arise from ingestion of tapeworm larvae present in infected pork. There is growing evidence that a high proportion of convulsions and epilepsy in endemic areas is attributable to neurocysticercosis and the poor rural communities engaged in pig husbandry are the worst affected.

This Ministry of Health project will be conducted in three communities of rural Mexico with 3,000 - 5,000 inhabitants per community and with significant human infection rates of *Taenia solium*, the pork tapeworm. The overall purpose of the research is to identify, through community studies, a community health education strategy that will complement a mass treatment campaign with Praziquantel, the drug of choice against *T. solium* infection. The objective is to break the cycle of transmission and reduce the worm burden in the community. The project will test the concept of involving community volunteers along with the local Primary Health Care personnel in the intervention.

A special feature of this project is its multidisciplinary nature involving researchers from three Mexican institutions and the South-South collaboration between Mexico, Peru and India in laboratory diagnosis and its field adaptation.

It is anticipated that the results of this study will facilitate the planning and implementation of a feasible prevention / control program against *Taenia solium*, cysticercosis and neurocysticercosis in Mexico and in the Latin American region.

3-P-90-0080

Workers' Participation (Zimbabwe)

Division: HS Programme: Health and the Environment

This research will build the capacity of the labour movement in Zimbabwe to undertake participatory occupational health and safety (OHS) research. The project will develop the capacity at shopfloor and union level to carry out a workplace survey of hazards through use of a simple workplace checklist, which will be tested for its reliability and validity. The data will also give the prevalence of the main hazards within the major industries involved in the project. Through comparison with international standards, the project will determine the extent to which current workplace levels of the selected hazards meet safe practices of use, storage, and first aid. The project will also assess current organization of OHS at shopfloor level, and the level of worker knowledge about and attitudes towards existing hazards. Training workshops in research methods and OHS will lay a foundation for future, more developed research in OHS, while production of guidelines to OHS research in the labour movement and rapid workplace assessment will be shared with other unions in the southern African region. A regional workshop will also enable collaborative formulation of future research projects.

/occupational safety/ /occupational accidents/ /industry/
/working conditions/ /evaluation/ /worker participation/
/training/ /research capacity/
Area under study: /Zimbabwe/

Commitment Date: 1990-12-14 Est. Completion: 1993-12-31

Recipient(s): Zimbabwe Congress of Trade Unions, ZW
Researcher(s): Loewenson, Rene

IDRC Contribution: \$ 209421 CAD

Status: Active

3-P-90-0081

Leishmaniasis - Andean Leishmaniasis Control (Peru) - Phase II

Division: HS Programme: Health and the Environment / Health Systems Research

A primary health care strategy for the control of Andean leishmaniasis is proposed. This strategy is based upon the characteristics of the epidemiology and ecology of the disease identified during phase I of this project. The findings in phase I indicated that people cannot only acquire leishmanial infection in their home environment, but also during various outdoor activities away from the domestic setting. The research in phase II will involve measures, such as early diagnosis and treatment of the disease, and insecticide spraying of domestic and outdoor sites of disease transmission. Most significantly, this strategy will also involve insecticide spraying and/or reforestation of rural foci to eliminate these most important and previously neglected sites of leishmania transmission. The impact of this approach, the execution of which will be carried out by members of the community, will be compared to that of the implementation of classic measures alone in a valley with similar characteristics.

/leishmaniasis/ /Andean region/ /disease transmission/ /rural areas/ /diagnosis/ /disease control/ /primary health care/ /social participation/ /insecticides/ /reforestation/
Area under study: /Peru/

Commitment Date: 1990-12-18 Est. Completion: 1993-12-18

Recipient(s): Universidad Peruana Cayetano Heredia (UPCH), PE
Researcher(s): Llanos-Cuentas, Alejandro

IDRC Contribution: \$ 205160 CAD

Status: Active

3-P-90-0082

Environment and Child Survival (Bangladesh)

Division: HS Programme: Health and the Environment

Bangladesh is rated by UNICEF (1990) as a country with a very high under-five mortality: 181 per 1000 live births. This project will determine the hierarchy of environmental and behavioural risk factors for child mortality from infectious diseases in the country to develop more strategic guidelines for affordable, efficient, and replicable interventions for child survival. The project will take place in Matlab, an area of rural Bangladesh presently under intensive demographic surveillance. It is estimated that about 620 children aged 1 to 59 months will die from infectious diseases including approximately 370 from diarrhoea, 200 from acute respiratory diseases, and about 50 from other infectious diseases during the next two years. Researchers will compare environmental and behavioral risk factor exposures among the expected 620 cases with those of the same number of surviving controls. An extensive number of risk factors will be examined within the themes of water and sanitation; household environment; and parental behaviour factors. Guidelines for the development of specific interventions will be generated for testing in a phase II project.

/child mortality/ /infectious diseases/ /risk/ /epidemiology/
/case studies/ /health planning/
Area under study: /Bangladesh/

Commitment Date: 1990-12-09 Est. Completion: 1993-12-09

Recipient(s): International Centre for Diarrhoeal Disease
Research (ICDDR), BD
Researcher(s): Hoque, Bilquis Amin

IDRC Contribution: \$ 191210 CAD

Status: Active

3-P-90-0100

Water Quality Control (Brazil / Chile) - Phase II

Division: HS Programme: Health and the Environment

Since 1985 IDRC has supported research on the development and testing of inexpensive and technically simple microbiological water quality tests for the monitoring of drinking water sources. Research activities have so far been laboratory-based and have concentrated on adapting selected tests to local conditions. The countries that participated in the first phase of this project were: Brazil, Chile, Egypt, Malaysia, Morocco, Peru, Singapore, Thailand, and Canada. An evaluation of the research results from all countries (3-A-88-4220) concluded that both the coliphage and H2S paper strip tests were promising simple techniques suitable for use in developing countries. Additional research is under way in Malaysia (3-P-90-0026) to develop and field test a commercial prototype of a coliphage field kit. This second phase project will complement the Malaysian study by refining the testing and interpretation methodologies for the H2S and coliphage techniques, and assessing the economic and technical feasibility of introducing the two tests into the monitoring programs of agencies operating water quality networks in Chile and Brazil.

/drinking water/ /water quality/ /tests/ /microbiology/
/training/

Area under study: /Latin America/ /Chile/ /Brazil/

Recipient(s): Universidade de Sao Paulo. Depto. de
Microbiologia, BR

Recipient(s): Universidad de Chile. Department of Civil
Engineering, CL
Researcher(s): Martins, M.T.
Researcher(s): Morales, Gabriela Castillo

IDRC Contribution: \$ 141910 CAD

Co-funding Agencies:

Brazil. Secretary of Public Health
Chile. Department of National Programs, National Service of
Sanitary Works

Status: Active

3-P-90-0101

Occupational Lung Disease (Indonesia)

Division: HS Programme: Health and the Environment

The stone quarrying and crushing industry is of considerable and increasing economic importance to Indonesia. The native quarried stone is, however, high in quartz content; the stone production, crushing, and sifting processes dusty; and the general working conditions poor, posing potentially serious threats to the health of the 83,000 workers currently employed in the industry. A definitive study of the working environment and the health of workers in this industry, has not been investigated previously. This project to be undertaken in one of the stone industries in West Java will determine the severity of the dust exposure conditions (respirable dust concentrations, percentage quartz content of the rock and dust); and establish the prevalence of lung diseases (silicosis, silico-tuberculosis) by radiological examination, disturbances in lung function, and respiratory symptoms. Approximately 1000 dust exposed workers and 300 nondust exposed workers (controls) will be examined. Recommendations will be made and directed to government authorities and the industry.

/stone/ /quarrying/ /working conditions/ /pneumoconiosis/
/occupational diseases/ /respiratory diseases/ /air
pollution/ /industrial workers/ /preventive medicine/
/occupational safety/ /measurement/ /questionnaires/
Area under study: /Indonesia/

Commitment Date: 1990-11-07 Est. Completion: 1991-11-07

Recipient(s): Regional Office of Department of Manpower, ID
Researcher(s): Djanarto Tanuredjo

IDRC Contribution: \$ 95580 CAD

Status: Active

3-P-90-0142

Infant Hepatitis B Immunization (Egypt)

Division: HS Programme: Health and the Environment

Hepatitis B virus (HBV) immunization of infants is being advocated by WHO for all newborns in developing countries where HBV infection is endemic. However, evidence is emerging that such immunization may not be effective in areas where Hepatitis B coexists with schistosomiasis. HBV vaccine efficacy tests have been conducted largely in developed countries, in populations free from the parasitic co-infections typical of developing countries. Preliminary results emerging from Egypt indicate that infants born of mothers harbouring active schistosomiasis might have induced immunological tolerance specific to HBV during the neonatal period. If confirmed this finding could have far reaching repercussions for the deployment of this important immunization program (i.e. the dose and immunization schedule required may need to be revised). This project will determine the efficacy of neonatal HBV immunization in populations born to mothers with and without schistosomiasis; and will provide additional information on early childhood transmission of both HBV and schistosomiasis in Egypt with a view to policy recommendations regarding HBV immunization.

/infectious diseases/ /viruses/ /vaccination/ /infants/
/schistosomiasis/ /immunology/ /testing/
Area under study: /Egypt/

Commitment Date: 1991-02-23 Est. Completion: 1994-02-23

Recipient(s): Menoufia University, EG
Researcher(s): Ghaffer, Yassin A.

IDRC Contribution: \$ 214752 CAD

Status: Active

3-P-90-0153

Urban Domestic Wastewater Treatment (Senegal)

Division: HS Programme: Health and the Environment

In Senegal, as in many developing countries as well as in some rural areas of industrial countries, it is common practice to discard untreated domestic wastewaters. Besides being totally useless, the mere presence of these waters constitutes a health risk. This project will carry out a feasibility study of the potential for purification of domestic wastewaters of Dakar by a procedure which uses the purifying capability of certain aquatic plants. This is a low-cost technology in comparison with the classical ones. A sociological study assessing the perception of the population of wastewater purification and the reuse of these waters will also be carried out. An ecological study of the palustrian flora of Senegal's marshland will enable researchers to choose the appropriate aquatic plants. Chemical analysis of wastewaters will be performed to assess the amount and variety of liquid waste along with the presently used purification methods; and the use of microphytes to treat wastewater and the economic value thereof.

/water treatment/ /waste waters/ /water reuse/ /aquatic plants/ /water chemistry/ /ecology/
Area under study: /Senegal/

Commitment Date: 1991-02-04 Est. Completion: 1991-06-22

Recipient(s): Université Cheikh Anta Diop, SN
Researcher(s): Niang, Seydou

IDRC Contribution: \$ 13703 CAD

Status: Active

3-P-90-0182

Rice Irrigation and Health (Nigeria)

Division: HS Programme: Health and the Environment

Commitment Date: 1991-01-25 Est. Completion: 1994-01-25

Recipient(s): Obafemi Awolowo University, NG
Researcher(s): Imevbore, A.M.A.

IDRC Contribution: \$ 97860 CAD

Status: Active

In Nigeria's attempt to attain self sufficiency in rice production, numerous irrigation projects have been established throughout the nation. The lower Anambra Rice Irrigation Project is currently the largest such project in Nigeria and comprises 35% of the nearly 12,000 hectares of rice fields.

Based on evidence from within and outside the West African region, it is being increasingly felt that adequate safeguards and preventive measures on health have not been considered in these schemes. It is thought that endemic diseases in the area may increase and that nutrition related problems in the affected communities might result.

This project, comprising of retrospective and prospective components, will attempt to elucidate the health related impact of the Lower Anambra Irrigation Project on surrounding communities. Specifically, vector borne diseases (Malaria, Schistosomiasis), socio-economic indicators and nutritional status of the people will be assessed and correlated so that appropriate recommendations for action can be made to the responsible authorities and to the government.

3-P-90-0193

Environmental Research (Zambia)

Division: HS Programme: Health and the Environment

This project will support the preparatory phase of a study to evaluate the impact of pollution on human health and the environment in Zambia's copper belt province. The copper mining industry, upon which the economy of the country is dependent, is the major contributor to such pollution. This initial project will determine the nature of the water pollution problem in the Kafue River system at Chingola and use this information to strengthen the capacity of the Mines Safety Department in fulfilling their regulatory and advisory functions. The project will assist in the establishment of an analytical laboratory in support of an environmental capability within the Department. It is anticipated that the information to be generated will be useful in any revisions of the legislation on pollution as well as for assessing the broader environmental and health impact. IDRC may consider further phases of this project provided that this phase leads to the development of an adequate analytical capability within the Department.

/copper industry/ /environmental effects/ /water pollution/
/water quality/ /pollution sources/ /testing/ /laboratories/
/institution building/ /capacity building/
Area under study: /Zambia/

Recipient(s): Zambia. Ministry of Mines, ZM
Researcher(s): Bari, M.M.

IDRC Contribution: \$ 81360 CAD

Status: Active

3-P-90-0194

Household Defluoridation (Kenya)

Division: HS Programme: Health and the Environment

IDRC supported a previous study by the Kenya Medical Research Institute (KEMRI) involving the development of a household defluoridation unit based on the use of bone charcoal and locally available materials (3-A-87-4782). This method proved to be successful in removing a reasonable amount of fluoride from water under laboratory conditions. This project will test, under field conditions, the use of a household defluoridation method based on the use of bone charcoal that has been locally prepared. Field trials will be undertaken in 3 communities consuming water with between 5 mg/L and 105 mg/L fluoride. The study will involve the application of knowledge, attitude, and perception studies aimed at evaluating the intake of dietary fluoride from other sources. The project will seek to maximize community involvement, and will evaluate the acceptability of this method of defluoridation.

/drinking water/ /fluorine/ /water quality/ /water treatment/
Area under study: /Kenya/

Commitment Date: 1991-04-11 Est. Completion: 1992-10-11

Recipient(s): Kenya Medical Research Institute, KE
Researcher(s): Mwaniki, David

IDRC Contribution: \$ 34271 CAD

Status: Active

3-P-90-0196

Sexual Behaviour and STD's in Long-Distance Truck Drivers (HIV)**Division: HS Programme: Health and the Environment / Health and the Community**

Looking at biological and socio-behaviourial factors which determine the transmission dynamics of HIV (Human Immunodeficiency Virus) infection in Africa, it is clear that male and female high frequency transmitter groups play critical roles. Previous work with male long-distance truck drivers in Kenya has shown that they have a very high prevalence of HIV infection, sufficient knowledge of AIDS and other sexually transmitted diseases (STDs) to reduce their risk of acquiring HIV infection, but still engage to a large extent in high risk behaviour. In this project, a cohort of long-distance drivers in the country will be followed longitudinally to examine the interaction of behavioural and biological risk factors, and their effect on the incidence of STDs and HIV infection. The effectiveness of an intervention program, consisting of STD diagnosis and treatment as well as related health education and counselling, will also be tested. Results from this study could be applied to similar populations elsewhere in Kenya and in East Africa.

/AIDS/ /disease transmission/ /sexual behaviour/ /males/
/drivers/ /disease control/ /health education/ /programme
planning/

Area under study: /Kenya/

Recipient(s): University of Nairobi, KE
Researcher(s): Bwayo, J.J.

IDRC Contribution: \$ 146774 CAD

Status: Active

3-P-90-0218

Botanical Piscicide Toxicology (Thailand)

Division: AFNS HS Programme: Fisheries / Health and the Environment

The leaves of *Maesa ramentacea* (Swimtop), a rapidly growing plant indigenous to Thailand, have been shown to be effective in eradicating predatory fish in fish cultivation ponds. The active ingredients (saponins) have been identified and their structure described. Swimtop extract has been found to be rapidly degradable and not to accumulate in the ecosystem. The plant could thus provide a natural, inexpensive, and abundantly available material in support of the fish cultivation industry. With commercialization being considered, the purpose of this project is to investigate the potential safety of the Swimtop ingredients also for human health. The OECD toxicity testing protocol has been selected to allow for international comparison and acceptance of the data. Special attention will be given to "good laboratory practices". The protocol is extensive and will include acute, subacute, subchronic, dermal, and reproductive toxicity, as well as teratogenic and mutagenic study components. The University of Ottawa, Canada will provide special training and consultant services.

/aquatic plants/ /biological control/ /fish culture/
/toxicology/
Area under study: /Thailand/

Commitment Date: 1991-04-11 Est. Completion: 1993-04-11

Recipient(s): Chiang Mai University, TH
Researcher(s): Kanjanapothi, Duangta

IDRC Contribution: \$ 113890 CAD

Status: Active

3-P-90-0229

Hepatitis C Epidemiology (China)

Division: HS Programme: Health and the Environment

Hepatitis B virus infection is the most common disease of global importance. This project will conduct a seroepidemiologic survey in Shanghai to determine the epidemiologic importance of the newly identified Hepatitis C virus (HCV) infection, which is believed to comprise the majority of underlying undiagnosed viral hepatitis in China. The project will determine the prevalence of HCV infection in the general population and in acute viral hepatitis patients, as well as selected high risk groups including chronic, persistent or active hepatitis, hepatocellular carcinoma, hemodialysis patients, and post-transfusion hepatitis patients. Risk factors associated with HCV transmission, its clinical features, and progression to chronicity will be studied along with familial transmission. This first ever study on Hepatitis C Virus infection in China will contribute to the assessment of the prevalence, morbidity, and importance of this infection for the population. It has particular importance concerning the potential input of Hepatitis B immunization programs planned in the region for the reduction of viral hepatitis and hepatocellular carcinoma.

/information dissemination/ /liver/ /viruses/ /epidemiology/
/disease transmission/ /risk/ /health surveys/
Area under study: /China/

Recipient(s): Shanghai Medical University, CN
Researcher(s): Hu, Shanlian

IDRC Contribution: \$ 61900 CAD

Status: Active

3-P-90-0254

Poison Control and Information Service Network (Philippines)

Division: HS IS Programme: Health and the Environment /
Socioeconomic Information -- Health and Social Issues

In the Philippines, an agricultural country, the heavy pesticide imports, influx of chemicals utilized in the industrial sector, and availability of more than 8000 brand named drugs make the absence of an active poison control and information service a very serious deficiency. This project will help set up and pilot test a national network responsible for the collection and dissemination of poison data and information, and the management of acute poisoning cases, specifically as it relates to monitoring, evaluation, and professional education. The network will service the physicians and health workers of 204 regional, provincial, district, and private hospitals; and 1000 rural health units and 1000 private clinics in the National Capital Region and Southern Mindanao.

/poisons/ /poisoning/ /data collecting/ /information
services/ /information networks/ /training/
Area under study: /Philippines/

Commitment Date: 1991-03-21 Est. Completion: 1993-03-21

Recipient(s): University of the Philippines. Department of
Pharmacology, PH
Researcher(s): Cortes-Maramba, Nelia P.

IDRC Contribution: \$ 90000 CAD

Status: Active

3-P-90-0274

Ecology and Prevention of Yellow Fever (Nigeria)

Division: HS Programme: Health and the Environment

Recipient(s): University of Ibadan. Department of Virology,
NG

Researcher(s): Tomori, Oyewale

IDRC Contribution: \$ 222090 CAD

Status: Active

Yellow Fever (YF), with a case fatality rate of over 50%, is a virus disease transmitted by certain mosquitos to people in both jungle and urban situations, with monkeys as the established natural reservoirs. It has been the cause of devastating epidemics in Africa as well as in areas of the Americas and West Indies. A recent analysis by the World Health Organization of a three-year period (1986-1988) of reported cases of YF in Nigeria, estimates 440,000 cases and 250,000 deaths. Epidemics have been both sporadic and widespread and are still occurring in the country.

Though emerging epidemiological information from these epidemics is scanty, indications are: (a) that nomadic populations may be associated with the spread of infection; (b) that there may be other natural amplifier animal hosts; (c) that the responsible insect vectors are uncertain; and (d) that the disease surveillance and reporting system is far from adequate.

This multidisciplinary study by a team of Nigerian investigators will seek relevant information on the following aspects. Beliefs and practices on YF in the community, their immune status, suspected animal reservoirs, insect vectors and their ecology will be investigated. The project will also examine the prevailing surveillance and reporting mechanisms in the endemic zones. With the support of the Nigerian Federal Ministry of Health, it is hoped that the generated information will stimulate the establishment of relevant and feasible preventive measures to minimise the morbidity and mortality due to YF in the country and serve as a model for the region.

3-P-90-0278

Schistosomiasis Intervention Trial with a Botanical
Molluscicide - ENDOD (Zimbabwe)

Division: HS Programme: Health and the Environment / Health
and the Community / Health Systems Research

Recipient(s): Zimbabwe. Ministry of Health, ZW
Researcher(s): Ndamba, Jerry

IDRC Contribution: \$ 242290 CAD

Status: Active

Mass chemotherapy is known to reduce the prevalence and morbidity of schistosomiasis. However, within one year, similar prevalence and morbidity levels as those before the chemotherapy become evident. This is attributed to re-infections due to uninterrupted schistosomiasis transmission. Mass chemotherapy alone for morbidity control is now recognized as unsustainable in most developing countries due to high recurrent costs. However it is not known whether mass chemotherapy followed by community based mollusciciding might prevent reinfection and sustain reduced morbidity for longer periods. Such a strategy might cost-effectively reduce the worm burden and contamination index of the community as well as the risk of re-infection by reducing or removing the snail intermediate hosts in community waterbodies. Although there are very effective synthetic molluscicides, these have proved too costly for most developing countries where schistosomiasis is focally endemic. Plant molluscicides offer an alternative. Of these, the best known is the soapberry *Phytolacca dodecandra* (Endod), a plant indigenous to Zimbabwe. During the past five years the most molluscicidal Zimbabwe varieties have been identified and pilot field trials have shown that the plant is effective in reducing snail intermediate hosts. The present study is designed to evaluate the efficacy, acceptability, sustainability, and cost-effectiveness of different approaches to maintain low prevalence, morbidity, and transmission of schistosomiasis following mass chemotherapy. Approaches compared in a community intervention trial include: application of the plant molluscicide *Phytolacca dodecandra* through community effort; through health services effort; and conventional chemotherapy through health services. The project also includes studies of local eco-toxicity, community participation and health economics of the alternative interventions.

3-P-90-0295

Pesticide Safe Use (Thailand)

Division: HS Programme: Health and the Environment

Pesticides play a very important role in agriculture, public health, and industry in Thailand. There is, however, concern about the increasing number of reported pesticide intoxications, particularly among farmers, who have been slow to adopt efficient and safe pesticide handling and use practices. Available training programs are ineffective and have been conducted without prior assessment of training needs. This project is directed towards improving the role that agricultural extension workers can play in encouraging and educating farmers in safe pesticide handling practices. A knowledge, attitudes and practices (KAP) approach will be used to assess training needs; training materials will be reviewed, improved and tested, on a training of trainers basis; and a nation-wide training program will be designed for implementation by the Department of Agricultural Extension in collaboration with Chulalongkorn University.

/pesticides/ /occupational safety/ /toxicity/ /farmers/
/safety education/ /training programmes/ /agricultural
extension/ /social surveys/ /attitudes/
Area under study: /Thailand/

Recipient(s): Chulalongkorn University. Department of
Pharmacology, TH
Researcher(s): Palarp Sinhaseni

IDRC Contribution: \$ 69730 CAD

Co-funding Agencies:

Thailand. Ministry of Agriculture, Department of Agricultural
Extension

Status: Active

3-P-90-1034

Integrated Fish Farming (FWI/China/SMU) - Phase II

Division: AFNS HS FAD Programme: Fisheries -- Aquaculture
and Mariculture / Agricultural Economics -- Production and
Utilization Systems / Health and the Environment

Recipient(s): China. Ministry of Agriculture, Animal
Husbandry and Fisheries, CN
Researcher(s): Guo Xianzhen
Researcher(s): Mathias, Jack A.

IDRC Contribution: \$ 574700 CAD

Co-funding Agencies:

Network of Aquaculture Centers in Asia (NACA)

Status: Active

The Asian-Pacific Regional Research and Training Centre for Integrated Fish Farming in Wuxi, People's Republic of China is requesting support for a second 3-year phase for research on further definition and refinement of the dynamics of integrated fish culture in the station ponds in the centre. This bio-technical research will include examination of nutrition and genetic improvement of the polycultured fish species. This phase will also include bio-economic modelling of on-farm data for integration with the above, examination of the relationship between integrated fish farming and human influenza, and the role of Chinese women in the integrated farming system. IDRC support will be under the Collaborative Program with linkages with the Freshwater Institute of Fisheries and Oceans Canada in Winnipeg and St Mary's University in Halifax.

SPECIAL INITIATIVES

3-P-89-0123

Iodine Deficiency Disorders (IDD) (Kenya)

Division: HS Programme: Special Initiatives

The group of Iodine Deficiency Disorders (IDDs), including hyperthyroidism/goitre, cretinism, and pregnancy wastage has been recognized by the Ministry of Health in Kenya as a priority health problem. Programs have been in force for about a decade to address the problem. For example, iodization of commercially distributed salt is required by law. Despite this, IDD remains a major, if preventable, public health problem in many areas of the country. With help from UNICEF, the government now aims to eliminate it within 5 years. This project will obtain data on the extent of the problem; identify chief areas of the disease; and assess the public's awareness about, accessibility to, and use of iodized salt. In addition, researchers will gauge consumption of goitrogenic foods. Project results will be used in planning intervention programs to eliminate IDDs.

/deficiency diseases/ /epidemiology/ /surveys/ /food
consumption/ /salt/ /disease control/ /health planning/
Area under study: /Kenya/

Recipient(s): Kenya. Ministry of Health, KE
Researcher(s): Gitau, Walter

IDRC Contribution: \$ 199982 CAD

Co-funding Agencies:

UNICEF

Funding: \$ 85200 CAD

Status: Active

3-P-90-0056

International Ethical Guidelines for Epidemiological Research

Division: HS Programme: Special Initiatives

As the need and the potential grow for the use of health research to help solve the health problems of the contemporary world, so do the societal anxieties regarding the ethical conduct of researchers, including epidemiologists. This is particularly so in the face of the AIDS pandemic. Since epidemiologists study groups (of people), requesting personal information, doing measurements, enquiring about intimate behaviour, and often carrying out invasive procedures, concerns arise regarding voluntary participation, consent, anonymity, confidentiality, justice, personal dignity, etc. The purpose of this project is to allow the Council of International Organizations of Medical Sciences (CIOMS) to develop and disseminate international guidelines for the establishment and adoption nationally of ethics policies and ethical standards, as well as ethical review procedures, for the conduct of epidemiological research. This will involve experts as well as lay people, from both developed and developing countries.

/epidemiology/ /medical research/ /ethics/ /individuals/
/human rights/ /decision making/
Area under study: /Global/

Commitment Date: 1990-08-20 Est. Completion: 1992-02-20

Recipient(s): Council for International Organizations of
Medial Sciences (CIOMS), CH
Researcher(s): Bankowski, Zbigniew

IDRC Contribution: \$ 58725 CAD

Co-funding Agencies:

WHO

Funding: \$ 219632 CAD

Status: Active

3-P-90-0098

Essential National Health Research (Mexico)

Division: HS Programme: Special Initiatives

The Commission on Health Research for Development was established by IDRC, the Edna McConnell Clark Foundation, and 14 other sponsoring agencies in 1987 to explore and make recommendations on how research might improve the health of the peoples of the developing world. The major recommendation of the Commission was Essential National Health Research (ENHR). ENHR aims to focus national resources upon the health problems of greatest significance to the people of a country. IDRC and SAREC (Swedish Agency for Research Cooperation with Developing Countries) have accepted responsibility for guiding a two year "interim process" to implement the Commission's recommendations in particular the stimulation and support for ENHR. This project will support the ENHR initiative in Mexico through the development of a National Plan for Essential Health Research (NPEHR) and the creation of the Mexican Commission on Health Research (MCHR). To this aim, an extensive consultation process with representatives from the major health research institutions of the country will be implemented to identify health problems in the country.

/health conditions/ /health planning/ /research needs/
/institution building/ /primary health care/
Area under study: /Mexico/

Commitment Date: 1990-12-11 Est. Completion: 1992-06-11

Recipient(s): Mexico. Ministry of Health, MX
Researcher(s): Sepulveda, Jaime

IDRC Contribution: \$ 63765 CAD

Status: Active

3-P-90-0174

Integrated Hepatitis B Diagnosis (PATH/Global)

Division: HS Programme: Special Initiatives

Commitment Date: 1991-04-10 Est. Completion: 1992-10-10

Recipient(s): Program for Appropriate Technology in Health
(PATH), CA

Researcher(s): Tam, Milton

IDRC Contribution: \$ 174690 CAD

Status: Active

In much of the developing world blood transfusion with blood not screened for HIV or Hepatitis B is common due to the lack of affordable technology. This project will develop a rapid, simple and affordable dipstick immunoassay for the detection of hepatitis B virus surface antigen (HBsAg) in human blood, plasma, or serum. This assay will use immobilized antibody to capture HBsAg on the solid phase, where it can be detected by a second (signal) antibody preparation which has been conjugated to colloidal gold. A positive reaction is indicated by the development of a red dot on the plastic strip. The method will be developed such that it can be integrated with the IDRC dipstick assay currently under development to detect human immunodeficiency virus (HIV) infection. Accuracy of the integrated method will be determined by testing a panel of 1000-2000 serum, plasma, and blood samples; sensitivity and specificity goals are greater than 98%. The development of a dot immunobinding assay for ABO blood grouping which can be used in parallel with the HBsAg/HIV immunoassay methods is included. Upon completion of development efforts, the project will then formulate a protocol for field trials, identify potential collaborating organizations and manufacturers in the developing world (with an initial emphasis on Africa, the area of greatest need), and initiate field validation and transfer of technology.

The availability of a simple core technology which allows the rapid and affordable determination of HIV, Hepatitis B, and blood type in a single test will be of great value in the screening of blood for transfusion in developing countries where AIDS and Hepatitis B are prevalent.

3-P-90-0243

International Forum For AIDS Research (IFAR)

Division: HS Programme: Special Initiatives

Commitment Date: 1991-02-28 Est. Completion: 1994-02-28

Recipient(s): National Academy of Sciences, US
Researcher(s): Mayer, William

IDRC Contribution: \$ 50000 CAD

Status: Active

The need for a mechanism which will improve coordination and communication among institutions which fund international AIDS research has been identified by donor agencies. Such a mechanism will enhance the possibilities for a more adequate response to the needs posed by the AIDS pandemic in developing countries and will complement the activities of the WHO's Global Programme on AIDS.

Representations of the key institutions agreed upon a set of parameters for the mechanism and given it the working title "International Forum for AIDS Research (IFAR). The Institute of Medicine and the National Academy of Sciences (US) have agreed to serve as the locus for IFAR. The objectives of the Forum are to identify research needs and opportunities, optimize funds currently available, anticipate possible funding scarcity and prepare appropriately for the expected clinical trials of vaccines and therapies. The forum will assist participating organizations in evaluating their directions and accomplishments in relation to other members and to learn from each others experiences.

The utility of IFAR will be tested over a 3-year period. The nucleus of IFAR at present consists of North American donors. However, the forum is committed to inviting participation by European and other international funders as well as developing country representatives. Each member institution will retain total, independent control of its own programs and resources. Participation in IFAR does not necessarily imply support for any specific programmatic initiative suggested by the Forum.

3-P-90-0288

International Health Communications in Canada - Phase II

Division: HS Programme: Special Initiatives

The international development community has begun to appreciate the importance of health in development and a number of major projects focussing on health have been initiated. This increased activity requires greater collaboration among Canadians and developing country partners. Phase I of this project supported the development of a bilingual quarterly newsletter, Synergy, as part of three initiatives to deal with the problems of Canadian institutions' low level of activity in international health. Phase II will provide two years of funding for the continuation of Synergy. Also, in an attempt to enhance Canada's ability to respond to the health needs of developing countries, an electronic bulletin will be produced and, in collaboration with other international health groups, a data base of Canadian projects, expertise, and opportunities for international health will be created.

/health/ /newsletters/ /information dissemination/
Area under study: /Canada/

Commitment Date: 1991-02-28 Est. Completion: 1993-01-31

Recipient(s): Association of Universities and Colleges of
Canada (AUCC), CA
Researcher(s): Bridgeo, Mary

IDRC Contribution: \$ 162845 CAD

Co-funding Agencies:

CIDA

Funding: \$ 123682 CAD

Status: Active

3-P-90-0340

Water and Sanitation (Zimbabwe)

Division: HS Programme: Special Initiatives

Recipient(s): University of Zimbabwe, ZW
Researcher(s): Taylor, Paul

IDRC Contribution: \$ 50000 CAD

Status: Active

The aim of this project is to improve the capacity of post-graduate students in the region to undertake applied research projects in the field of Water and Sanitation. It is proposed that a number of small grants (CAD\$ 5000 - 7500) be made available for small projects of 3-12 months duration. The grants will be administered by the Training Centre for Water and Sanitation, and will be awarded by an appropriately established review committee.

INSTITUTIONAL STRENGTHENING PROJECTS

3-P-87-0044

**Training in Priority Health Problems in Medical Education
(Global) - Phase II****Division: HS Programme: Health Systems Research**

To reorient medical education towards a more community-oriented approach, a network of Community-Oriented Educational Institutions for Health Sciences was formed in 1979, with the support of the World Health Organization. In 1984, a Network Task Force on Priority Health Problems in Medical Education was created. This Task Force developed a project to train key faculty members, from nine health sciences educational institutions located primarily in developing countries, in a community-based "priority health problems approach" both to medical education, and to the investigation and management of health problems. IDRC provided support for four trainees (Fellows) to attend an intensive 15-week program (Study Block 1) at McMaster University in Hamilton, Ontario in early 1986. This grant provides support for the fellows to participate in Study Block 2 during which time they will finalize their plans for curriculum change at their respective educational institutions.

/health services/ /medical education/ /curriculum/
/instructors/ /training programmes/
Area under study: /Global/

Commitment Date: 1987-07-09 Est. Completion: 1988-06-24

Recipient(s): McMaster University, CA
Researcher(s): Neufeld, Victor

IDRC Contribution: \$ 45000 CAD

Co-funding Agencies:

Rockefeller Foundation
Funding: \$ 25000 CAD

CIDA
Funding: \$ 50000 CAD

WHO
World Bank

Status: Closed

3-P-87-0200

Training in Health Management (Canada) - Phase III

Division: HS Programme: Health Systems Research / Health Systems

In 1985, a course designed to enhance the research and management skills of senior physicians from medical schools in developing countries started at the University of Toronto. Participants from China attended the first course which was made possible through seed money from the Rockefeller Foundation. The second and third years of the program were funded by the Rockefeller Foundation, who supplied the core course support, and by IDRC, who provided fellowship support through earlier phases of the project. This third phase grant provides fellowship support for 24 trainees and funds for a formal course evaluation.

/health administration/ /training courses/ /health policy/
/programme evaluation/ /management development/
Area under study: /Global/

Commitment Date: 1988-03-16 Est. Completion: 1991-03-16

Recipient(s): University of Toronto, CA
Researcher(s): Bombardier, Claire

IDRC Contribution: \$ 396450 CAD

Co-funding Agencies:

Rockefeller Foundation

Status: Active

3-P-87-0305

**Training in Priority Health Problems in Medical Education
(Global) - Phase III****Division: HS Programme: Health Systems Research**

A Network of Community-Oriented Educational Institutions for Health Sciences was formed in 1979 with the goal of reorienting medical education towards a more community-based approach. In 1984, a Network Task Force on Priority Health Problems in Medical Education was created. This Task Force developed a project to train key faculty members at nine health sciences educational institutions located primarily in developing countries. IDRC provided support for four trainees (Fellows) to attend an intensive 15-week program (Phase I) at McMaster University in Hamilton, Ontario, in 1986. During the second session in 1987 (Phase II), the Fellows reviewed their progress in the implementation of strategies for curriculum change in their home institutions and made final adjustments to their plan of action. This third and final session (Phase III), will summarize project activity. Work with participating institutions in designing a longer-range plan for community-based education and research development will be done.

/medical education/ /curriculum/ /health services/ /training
programmes/

Area under study: /Global/

Commitment Date: 1988-06-06 Est. Completion: 1989-06-24

Recipient(s): McMaster University, CA
Researcher(s): Neufeld, Victor

IDRC Contribution: \$ 77960 CAD

Co-funding Agencies:

CIDA

Funding: \$ 65000 CAD

Rockefeller Foundation

Funding: \$ 50000 CAD

Status: Closed

3-P-87-1041

Institution Development and Infant Nutrition Research

Division: HS FAD Programme: Maternal and Child Health /
Health and the Community / Training for Institutional
Development

It is now acknowledged that nutritional problems among Chinese women and children exists, and are of critical importance in the context of the one-child family. However, little hard data exists; nor do the skills for research. Two centres, the Sun Yat Sen University for Medical Sciences (SUMS) and the Zhijiang Medical College in Hangzhou, have been designated national leaders in nutrition training and research. The project will allow the SUMS and the well respected Department of Nutritional Sciences, University of Toronto, to collaborate in training Chinese nutritionists and to undertake relevant research, emphasizing community nutrition and therapeutic nutrition. The acquisition of skills and the development of a data base will allow extension to other Chinese centres and lay the basis for important public health policy and program decisions.

/human nutrition/ /infants/ /feeding/ /maternal and child
health/ /nutrition research/ /training/ /institution
building/

Area under study: /China/

Commitment Date: 1989-02-20 Est. Completion: 1994-02-20

Recipient(s): University of Toronto, CA

Recipient(s): Sun Yat-Sen University of Medical Sciences.
Dept. of Clinical Nutrition, CN
Researcher(s): Anderson, G. Harvey
Researcher(s): Ho Zhi-Chien

IDRC Contribution: \$ 478950 CAD

Status: Active

3-P-88-0142

Applied Nutrition Research (Kenya) - Phase II

Division: HS Programme: Health and the Community / Maternal and Child Health

Malnutrition is a major public health problem and a key issue for health planning in eastern and southern Africa. Support for research in human nutrition is a major priority. This Phase II project represents support for 12 nutritionists from East Africa to undertake Master's level community-based field research in applied nutrition. These nutritionists are graduate students comprising the second class of the University of Nairobi's Applied Nutrition Program. The program was created in 1984, and is developing into a regional centre of excellence for research and training in human nutrition. Phase I consisted of support for the Program's first class of students. The students are all on study leave from senior positions in governmental and academic institutions. Results from these studies will be widely disseminated and the ultimate beneficiaries will be the large numbers of malnourished individuals in the region.

/human nutrition/ /nutrition research/ /methodology/
/educational grants/ /research capacity/
Area under study: /East Africa/

Commitment Date: 1988-12-23 Est. Completion: 1990-12-23

Recipient(s): University of Nairobi, KE
Researcher(s): Kielmann, Arnfried A.

IDRC Contribution: \$ 153150 CAD

Status: Active

3-P-88-0205

PAHOU Health Development Project (PHDP) - Institutional Capacity Building (ISRI)

Division: HS Programme: Health Systems Research / Health and the Community

West Africa has the highest gross infant and juvenile mortality, with an accompanying poor primary health care system in both rural and urban areas, and very low community participation in health development activities. Improving the primary health care research capacity of West African institutions is viewed as a first step within a more comprehensive plan to mitigate this grave situation. This project aims to strengthen the Faculty of Health Sciences, University of Benin, one of the few institutions in the region with a successful track record in applied field research concerning primary health care. The project will also provide for the expansion of the faculty's PAHOU project, initiated in 1974. The latter is engaged in doing research in the development of participatory, self-sustained, community-based primary health care delivery system. Through this project, the Faculty will offer a larger number and a broader range of training opportunities for health workers in Benin and other African countries.

/primary health care/ /research capacity/ /institution building/ /research centres/ /training/
Area under study: /Benin/

Commitment Date: 1989-11-27 Est. Completion: 1991-11-27

Recipient(s): Université nationale du Bénin, BJ

IDRC Contribution: \$ 1567220 CAD

Co-funding Agencies:

UNICEF

Status: Active

3-P-89-0184

University Partnership in Essential Health Research

Division: HS Programme: Health Systems Research

The Network of Community-Oriented Educational Institutions for Health Sciences is a group of health sciences training institutions, which are playing a key role in trying to reorient medical education to meet community health needs. This project is an initiative by the Network, which links with the current discussions of the Commission on Health Research for Development. The goal of the project is to improve the relevance of health professions education by enhancing the ability of graduates to help identify and solve the problems of communities in which they serve. It is to be achieved by having students participate in health research in a systematic way and as an integral part of their training. The framework for this training is a new system of partnerships among universities, governments, and communities, the focus of which is a program of essential national health research.

/medical education/ /curriculum/ /research/ /community
development/ /health services/ /needs assessment/
Area under study: /Global/

Commitment Date: 1989-12-08 Est. Completion: 1991-06-08

Recipient(s): McMaster University, CA
Researcher(s): Neufeld, V.

IDRC Contribution: \$ 125000 CAD

Co-funding Agencies:

Rockefeller Foundation
Funding: \$ 58000 CAD

Network of Community-Oriented Educational Institutions for
Health Sciences

Status: Active

3-P-88-1001

International Health Exchange Program - Phase V

Division: HS FAD Programme: Special Initiatives / Training
for Careers in Development

Developing Canadian expertise in the International Health field has been of great concern to the Health Sciences Division of IDRC. Canada has few professionals in this field. In an effort to build Canadian expertise, IDRC has supported, since 1983, an exchange of undergraduate Canadian medical students and developing-country postgraduate health professionals for short periods. This project provides continued support to the Canadian Society for Tropical Medicine and International Health (CSTMIH) to execute the International Health Exchange Program (IHEP). This grant will permit IHEP to continue its activities for one more year while it organizes a consultation of Canadian experts in international health to determine what changes would make the most effective use of this particular training resource.

/health/ /research fellowships/ /health personnel/
/vocational education/ /student exchange/
Area under study: /Global/

Commitment Date: 1988-07-14 Est. Completion: 1990-06-30

Recipient(s): Canadian Society for Tropical Medicine and
International Health, CA
Researcher(s): Larivière, Jean

IDRC Contribution: \$ 441190 CAD

Status: Active

3-P-89-0296

Proposed Canadian University Consortium for Health in
Development (CUCHID)

Division: HS Programme: Special Initiative

The "Canadian University Consortium for Health in Development" - CUCHID is now, in concept and intent, a national consortium for sixteen participating universities. Its overall mission is to strengthen Canadian academic capacity for contributing to the solution of important health problems in developing countries, and to bring together Canadian and developing country university resources in this process. This project will facilitate the actual formation and incorporation of CUCHID, and provide partial support for activities. Specifically, the project will support the CUCHID Council and Executive Committee in a strategic planning exercise in 1990 and 1991; launch a small number of task groups, enabling them to begin activities related to the main goals of CUCHID; and provide partial support for administrative activities during the planning phase.

/health/ /economic and social development/ /scientific
cooperation/ /universities/ /networks/ /institution building/
/information exchange/ /medical education/ /training
programmes/ /research capacity/
Area under study: /Global/

Commitment Date: 1990-03-05 Est. Completion: 1992-01-31

Recipient(s): Canadian Society for International Health, CA
Researcher(s): Neufeld, Vic

IDRC Contribution: \$ 156900 CAD

Co-funding Agencies:

University of Alberta
University of British Columbia
Dalhousie University
University of Guelph
Laval University
University of Manitoba
McGill University
McMaster University
Memorial University of Newfoundland
University of Montreal
University of Ottawa
University of Quebec
Queen's University
Ryerson Polytechnical Institute
St. Francis Xavier University
University of Toronto

3-P-89-0319

Evaluation and Planning Centre (South Africa) - Phase I

Division: HS Programme: Health Systems Research

The apartheid system in South Africa has had negative effects on the health status of the majority of the population. In addressing problems of health and development in a nonracial, democratic, and equitable post-apartheid state, a number of nongovernmental organizations have emerged, including the Evaluation and Planning Centre (EPC) set up in the Department of Paediatrics, Natal University. The Centre is morally supported by the National Medical and Dental Association (NAMDA) and the National Progressive Primary Health Care Network (NPPHC). Under this project, EPC will mobilize and coordinate the human and material resources necessary for it to function in policy formulation, health management, applied research, and evaluation, with particular attention to community-based health initiatives, working with and for the mass democratic movement. EPC will organize training workshops for health personnel; develop and test health education material; and conduct small research projects to assess the health care needs of the poor.

/primary health care/ /health planning/ /health policy/
/policy making/ /apartheid/ /democratization/ /health
personnel/ /training/ /applied research/ /research capacity/
/institution building/
Area under study: /South Africa/

Commitment Date: 1990-09-04 Est. Completion: 1991-09-04

Recipient(s): University of Natal. Department of Pediatrics,
ZA
Researcher(s): Coovadia, H.M.

IDRC Contribution: \$ 108359 CAD

Co-funding Agencies:

Kagiso Trust
Kellogg Foundation

Status: Active

3-P-89-1001

Young Canadian Researchers Award Program

Division: HS SS COMM FAD Programme: Training for Careers in Development

Initiated in 1982, the Young Canadian Researchers Awards are offered to Canadian graduate students (permanent residents) and junior professionals undertaking research in Latin America, Africa or Asia on issues of concern to international development. The purpose of this award program is to create support for Canadian research capacity that is responsive to the Third World. Specifically, the program provides funds for practical attachments or field research for up to 12 months. Canadian graduate students at the PhD and Master's level registered in a Canadian university in areas of concern to IDRC; or Canadian professionals working in the fields of communication media, finance, and administration; or Canadian researchers involved in a project or program activity of IDRC are eligible. This grant provides continued support for the awards program.

/research fellowships/ /higher education/ /training abroad/
/Canadians/ /development research/ /research capacity/
Area under study: /Global/

Recipient(s): International Development Research Centre
(IDRC), CA

IDRC Contribution: \$ 625000 CAD

Status: Active

3-P-90-0034

Regional Vaccinology Centres (Latin America)

Division: HS Programme: Special Initiatives

Infectious diseases continue to be the leading cause of infant and child mortality (death) and morbidity (illness) amongst the poor of Latin America. While in theory many of these diseases should be preventable through vaccination, for some diseases the high cost of vaccines and the logistics of vaccination constrain the use of existing vaccines. For other infectious and parasitic diseases, there are as yet no vaccines. However, biotechnology has revolutionized the development and production of vaccines and excellent biotechnology centres exist in Brazil and Mexico. This project will permit the Mexican Foundation for Health with the assistance of the Pan American Health Organization (PAHO) to study the feasibility of establishing a Latin American network of vaccinology centres anchored by the strong Brazilian and Mexican institutions. This is a unique endeavour to establish South/South collaboration and to use "cutting edge" science to solve practical public health problems.

/vaccines/ /research and development/ /bioengineering/
/regional cooperation/ /institutional framework/ /institution
building/ /feasibility studies/
Area under study: /Latin America/ /Brazil/ /Mexico/

Commitment Date: 1990-10-04 Est. Completion: 1991-10-04

Recipient(s): Pan American Health Organization (PAHO), US
Researcher(s): Soberon, Guillermo

IDRC Contribution: \$ 58275 CAD

Co-funding Agencies:

Rockefeller Foundation
Funding: \$ 349650 CAD

Brazil
Funding: \$ 87412 CAD

Mexico
Funding: \$ 87412 CAD

Status: Active

3-P-90-0095

Strengthening Capability of Essential Health Research / ISRI
(Mozambique)

Division: HS IS SS FAD Programme: Health and the Community
/ Health and the Environment / Health Systems Research /
Socioeconomic Information / Environment Policy Program /
Training for Institutional Development

Commitment Date: 1991-01-25 Est. Completion: 1994-01-25

Recipient(s): Mozambique. Ministry of Health, MZ
Researcher(s): Barreto, Jorge

IDRC Contribution: \$ 875000 CAD

Co-funding Agencies:

SAREC
GTZ

Status: Active

The overall aim of this project is to begin a process of strengthening Mozambique's essential national research capabilities. This proposal covers the first three years of a proposed ten years of core support to be shared between IDRC, GTZ and SAREC. At this time, four divisions of IDRC will contribute funds and support.

The first phase will permit the formation of a nucleus of research training capabilities to be located within Mozambique's principal research/training institutions: 1) The National Institute of Health (INS) ; 2) The Faculty of Medicine; 3) The Regional Centre for Health Development (CRDS). The INS will be the administering agency, supported by a representative Board.

Mozambique is now in a stage of transition. On the advice of the IMF of the World Bank it has embarked on a new economic system. As a result, funds available for public services, including research into high priority health areas have progressively diminished.

The physical infrastructure, i.e. buildings in which to do training and research, is both available and surprisingly well-maintained. There is however a need for refurbishing and access to scientific information is seen as a principal need. There is as well a small nucleus of staff who are both skilled and dedicated.

Initially a plan for training in areas basic to a program of national health research, improved access to scientific information (especially the shared Documentation Centre), and a small grants program are proposed.

This project is highly relevant at this time in Mozambique and is as well likely to be a model for future initiatives arising from the recommendations of the International Commission on Health Research for Development.

3-P-90-0099

International Commission on Health Research for Developing Countries - Phase II

Division: HS Programme: Special Initiatives

Recipient(s): International Development Research Centre (IDRC), CA

Researcher(s): Freij, Lennart

Researcher(s): Smith, Karl A.

IDRC Contribution: \$ 300000 CAD

Co-funding Agencies:

SAREC

Ford Foundation

Rockefeller Foundation

ODA

GTZ

EDNA McConnell Clark Foundation

Status: Active

The Commission On Health Research for Development was established by IDRC and 15 other sponsors in 1986. The Commission's report recommending primarily that each country should undertake its own Essential National Health Research (ENHR) was considered at a Nobel Conference in February of 1990. The 90 representatives from 28 countries and 3 UN Agencies endorsed the Commission's recommendations and asked IDRC and SAREC to take responsibility for a two year "Interim Process" to promote the concept of ENHR, permit countries to plan their ENHR programs and evolve proposals for longer term implementation of the Commission's Recommendations. The latter were endorsed by the World Health Assembly in May 1990 and there has been an enthusiastic response from countries and agencies for ENHR and for the financial support of the IDRC/SAREC Interim Process. IDRC and SAREC have begun the Interim Process and put in motion plans for its operation for 1990-1992. SAREC has pledged CAD 325,000 for the process and the HSD proposes to contribute CAD 300,000 on behalf of the centre. The remainder of the funds for the Interim Process will be obtained from other sponsors.

3-P-90-0132

Applied Nutrition (Kenya) - Phase III

Division: HS SPA Programme: Health Systems Research /
Health and the Community / Centre-wide Nutrition Unit

This project will continue strengthening postgraduate applied nutrition training in the East African region, which was facilitated by previous grants from IDRC. Small grants will be made available to enable postgraduate students in the region to undertake appropriate research in applied human nutrition and public health. The aim of these projects will be to provide the students with the necessary research experience to develop action-oriented research in their place of work and country of origin. In addition, it is proposed that small grants be made available to the Unit of Applied Nutrition to develop, through its faculty members, independent research activities as a means for strengthening training capabilities in applied nutrition and public health. The grant will also enable the Unit to provide a series of short-term training courses and seminars for appropriate persons in the region to further strengthen research capabilities. Thus these activities will enhance the Unit's regional and Pan-African role.

/human nutrition/ /nutrition research/ /policy making/
/training courses/ /methodology/ /higher education/
/institution building/ /research capacity/ /capacity
building/
Area under study: /East Africa/

Commitment Date: 1991-03-04 Est. Completion: 1993-03-04

Recipient(s): University of Nairobi. Department of Food
Technology and Nutrition, KE
Researcher(s): Martim, Gabriel

IDRC Contribution: \$ 420000 CAD

Co-funding Agencies:

FAO
GTZ

Status: Active

3-P-90-0133

Economic Policy, Equity and Health Network (Africa)

Division: HS SS Programme: Health Systems Research /
Economic Policy

The continuing economic and social crisis in sub-Saharan Africa is having serious effects on the poor and their ability to meet their basic needs. It has become increasingly apparent that economic policy is a major determinant of health status, and that structural adjustment programs have not reversed the deterioration in health. As responsibility for basic needs has been progressively shifted from the state onto individuals and families, access to education, nutrition, health care, and other social services has declined, resulting in further inequalities in health. This project will explore the links among economic policy, equity, and health through the development and support of an African network of independent researchers and community-based organizations. Research questions to be explored include the nature and distribution of the impact of economic policies on health and health-determining factors; how economic adjustment affects policies directed toward equity in health care and popular participation; what social and economic alternatives exist to the current trends in Africa and what social forces act for or as obstacles to the development of viable alternatives.

/economic policy/ /structural adjustment/ /health conditions/
/poverty/ /resource allocation/ /research capacity/ /research
networks/ /participatory research/ /information
dissemination/

Area under study: /Africa South of Sahara/

Commitment Date: 1991-01-14 Est. Completion: 1993-07-14

Recipient(s): Zimbabwe Congress of Trade Unions, ZW
Researcher(s): Loewenson, Rene

IDRC Contribution: \$ 229425 CAD

Status: Active

3-P-90-0211

Health Care Evaluation and Management Skills (Canada) - Phase IV

Division: HS Programme: Health Systems Research

Commitment Date: 1991-02-22 Est. Completion: 1992-03-18

Recipient(s): University of Toronto, CA
Researcher(s): Bombardier, Claire
Researcher(s): Fanning, Mary

IDRC Contribution: \$ 173568 CAD

Co-funding Agencies:

Rockefeller Foundation

Status: Active

The Health Care Evaluation and Management Skills program was developed at the University of Toronto, in 1985. This program was generated in response to the growing need to address organizational and management issues encountered by emerging Research/Evaluation units in the lesser developed world. The ideal target for this training has been defined as an established member of a health organization, who has a demonstrated linkage with a Research/Evaluation unit and a commitment to its success. It is anticipated that graduates will act as agents of change in the development of an interdisciplinary Research/Evaluation team, and demonstrate a capacity to influence and improve policy creation.

Since its inception, 53 graduates have been trained. The course has received financial support from both IDRC and INCLEN Inc.

In an IDRC External Evaluation Review in May 1990, it was recommended that the Toronto course continue for an additional 3-5 years. Additionally, the faculty should work towards the development of a version of the course for use by a partner country, likely in the Africa region. The Toronto faculty intends to work towards developing a proposal, which meets these goals, for submission in 1991.

This current proposal is a request for continued support of the program in 1991. The bulk of the monies requested will support the attendance of 8 fellows at the upcoming sessions in Toronto. During the term of this funding, the faculty will seek to implement the recommendations of the evaluation team concerning follow-up of graduates; selected modifications to the curriculum and transfer of a version of the course to a partner country. It is anticipated that a proposal for an additional three to five years, in the new format, will be submitted to IDRC/INCLEN in F.Y. 91/92.

IDRIS.IDR

3-P-90-0217

CIMDER (Colombia) - Phase III

Division: HS Programme: Health Systems Research / Health and the Community

Commitment Date: 1991-05-27 Est. Completion: 1994-05-09

Recipient(s): Centro de Investigaciones Multidisciplinarias en Desarrollo (CIMDER), CO
Researcher(s): de Salazar, Ligia Malagon

IDRC Contribution: \$ 360000 CAD

Status: Active

The Centre for Multidisciplinary Research in Development (CIMDER) in Cali, Colombia began researching the Primary Health Care model in 1973 - five years before the WHO's official endorsement. Since 1974 IDRC has supported CIMDER in the form of projects and institutional support. The goal was for CIMDER to become a major research centre for rural primary health care strategies and a regional reference centre for health services research.

Three external evaluations of CIMDER have been conducted with the conclusion that CIMDER has achieved this goal and that project performance has been good. A major recommendation of the most recent evaluation was that IDRC support be directed to assuring the financial stability of this organization.

The purpose of this request is to strengthen the institutional capacity of CIMDER to carry out community-based research in partnership with communities, academic institutions and government. Because of its extensive experience at both the community and government levels, CIMDER is suitably placed to serve as a national focal point for Essential National Health Research (ENHR) Colombia. In addition the project will assist CIMDER to achieve self-sufficiency through the establishment of mechanisms for national and international support.