Research Impact

Health Research Capacity Building
Dr. Oum Sophal
Director, National Centre for Hygiene and Epidemiology
Ministry of Health,
Phnom Penh Cambodia

Case Study conducted by Greg Armstrong, June - September 1997
Health Research Capacity Building
Project Leader: Dr. Oum Sophal, Director
National Centre for Hygiene and Epidemiology
Ministry of Health,
Phnom Penh Cambodia
Budget: $136,650/

1. Background

The purpose of this project was to strengthen the research capacity of key staff in the Ministry of Health, in order to facilitate the creation of provincial networks for surveillance of diseases, and training of staff.

The 13 staff selected were mid to senior level health practitioners, not researchers, from the Institute of Hygiene and Epidemiology (4 people), the Mother and Child Health Centre (3 people), the National Tuberculosis Centre (2 people) and the Malaria Centre (3 people). One additional staff member, a doctor working for the Ministry of Rural Development, also participated. The project was designed to provide training on quantitative research methods through a combination of lectures and field research projects relevant to the participants' professional responsibilities.

This project was selected for inclusion in the impact review, because it has several interesting characteristics:

a) Training took place in a post-conflict reconstruction situation (in fact limited conflict continues);

b) It used a participatory training methodology;

c) Cross-cultural training issues were involved because the trainers came from Thailand.

2. Methodology of the Case Study

The case study used a review of the IDRC project documents and reports including a) the project proposal; b) the Project Summary; c) the Report on Health System Research Workshop (Oct. 94 - March 96), d) project monitoring memos and e) a consultant's report. This was followed by interviews in Bangkok and Phnom Penh with one Thai staff member (the training team leader), the project director, and seven of the 13 participants in the
training programme. The other six participants were unavailable during the period the interviews were conducted. Interviews with the Thai trainer were conducted in English and Thai, and with the Khmer participants in English. English-language capacity varied widely among Khmer participants from very good to limited.

3. Project Context

Prior to 1993 there was almost no indigenous research capacity in the health field in Cambodia, because of the long period of political and military conflict which has lasted for the past 25 years. Many health care professionals were killed during the Khmer Rouge period, and few expatriate Khmer health professionals have opted to work in the public sector, if they returned to Cambodia after 1993. Previous training programmes undertaken during the war years had been terminated after two participants were killed by land mines during field trips. Even during the period of this training, which included field research, participants had to choose research sites carefully, with an eye not just to the efficacy of research processes, but also to physical security.

While the short-term objective was to create or upgrade research skills of the participants, intermediate outputs specified in the proposal were to be

a) feedback to policy within the Ministry of Health,
b) feedback to field health practice, and
c) new research projects.

The ultimate intended impact was to be earlier detection and more effective treatment of disease in rural areas. Indirect impacts implied in the project development were increased coordination among agencies within the Ministry of Health, reduction in the overlap of work among agencies in the field, and a good working association with Thai health care professionals. There was no evidence of prior collaboration between Thais and Cambodians on this subject. In effect, this project was implicitly funded as phase one of a potentially multiphase project, with funding for subsequent phases to be sought from other donors, although no specific mechanisms were specified in the proposal, to solicit such funding.

4. Project Description

a) Strategies

This project was designed to have two major components:
1. Classroom study of research theory
2. Field research, and presentation of results.

This strategy resulted from the project director's experience with training in Liverpool and in Australia, both of which led him to believe that conducting field research was a more valuable learning experience than classroom lectures alone.

b) Decisions

All significant management decisions concerning the selection of participants, the schedule and selection of trainers, were made by the project director, Dr. Oum Sophal from Cambodia, and by the chief trainer, Dr. Chitr Sitthi-Amorn, from Thailand.

The project director, Dr. Oum Sophal, was a professional colleague of the Minister, who personally supported the project, and ensured that senior staff from the Ministry's participating centres, were available for participation as students in the project.

c) Inputs

Funding was provided by IDRC. No problems were encountered with the disbursements. A critical decision was made during project design, to use a team of Thai trainers from Chulalongkorn University for the project. Three primary considerations motivated this:

1. The Thais were known (originally) to IDRC and later to the Cambodian project leader.

2. They were known to have solid research skills in rural environments with health problems similar to those in Cambodia.

3. The Thais were cheaper than equivalent Canadian or European trainers would have been, both because Asian professional fees are lower than those in some other parts of the world, and because travel costs would be minimal.

The Thai motivation for participation was not money, but a desire on the part of Dr. Chitr Sitthi-Amorn, Dean of the College of Public Health at Chulalongkorn University, to try out a training process which could be adapted to Thai needs:

"We were preparing to develop the College of Public Health at that time, preparing new programmes, and I wanted to test the idea of experience-based training, to see if it worked better. We thought it would work, but we needed to test it. When the Cambodia project was conceived, I thought this was
a good opportunity, because if it worked there, where conditions are very difficult, then it should work here too, where it is much easier to put people into the field, to get the experience, because it is not dangerous, and there are good roads, etc. I wanted to see what was easy, and what was hard, and how to design a strategy for this training, which could make it more effective."

d) Process

Preparatory training on word processing and computer operations began in October, and lasted 3 weeks. This was followed by two months of theory on quantitative methods, statistical analysis and then qualitative methods in a classroom situation. During this period, the Thai trainers, supplemented by one IDRC staff member at one workshop, and by a British researcher, trained the 13 participants in research design, proposal development, and research implementation. All training was conducted in English.

The 13 students were all senior staff, most MD's, with significant operational responsibility in their own centres. Their participation (see section on analysis) was facilitated by the Minister's active endorsement of the project. At the conclusion of the theoretical component of training, they divided into five groups, to conduct field research on issues of concern to them in their normal work. Field research lasted four months, and in June the researchers met with trainers in Phnom Penh, to analyze project results. A dissemination workshop took place in mid June, and a year later, a one-week training of trainers workshop was held. The five topics included:

1. A case study of Current Practices for the Prevention and Treatment of Dengue Fever in Kandal Province (3 staff from the National Centre for Hygiene and Epidemiology)

Result: Recommended specific drug treatments

2. A case study of Non-Utilization of ante-natal services in Bati district of Takeo province (3 staff from the Mother and Child Health Centre)

Result: Recommended more research on failure of rural women to access antenatal services, and suggested alternative strategies for spreading the message to rural areas about antenatal services.
3. A Preliminary Evaluation of the Implementation of New Tuberculosis Treatment Protocol in Cambodia staff from the National Tuberculosis Centre

Result: Recommended further research to compare patients using new and old treatment regimes, to see if the new treatments led to more compliance.

4. A KAP Study of Acute Severe Diarrhoeal Disease Management of People at Risk during the 1994 Epidemic (2 staff from the Centre for Hygiene and Epidemiology)

Result: Recommended training for local health workers.

5. An Evaluation of Insecticide-Treated Bed Nets in the Malaria Control Programme in Pursat Province (3 staff from the Malarian Centre)

Result: Recommended treatment of hammock nets for migrant workers.

6. A study of vaccine coverage (2 staff, including Director, of the Centre for Hygiene and Epidemiology) - conducted at the request of UNICEF.

Result: Recommended that vaccinations focus on provinces with large populations, and no security problems, redress shortages of syringes and step up the pace of polio vaccinations. UNICEF is reported to have accepted and implemented these recommendations.

The general consensus was that the quality of the individual research projects (not a primary objective of the project, but a mechanism for provision of training) was good. If Cambodia had the resources to follow up on this research, the view expressed by senior officials is that the research would have provided a firm basis for action.

5. Project Analysis

5.1 Outputs and Outcomes

5.1.a) Institutional capacity outcomes

CAMBODIA

The Cambodian government has few financial resources to apply to institutional development. Most staff, regardless of their professional qualifications or experience, receive a salary
which is approximately 10% of the amount required to meet basic living expenses in Phnom Penh. Consequently, few staff can afford to work full time at their civil service jobs. Only those who receive assistance from international organizations can do so.

This project provided per diems, and these per diems permitted the staff to spend most of the two months of theoretical training, in the classroom. The assistance also permitted them to apply themselves seriously to the research case studies. None of this would have been possible, without this assistance. Without it, all of the staff would have been forced to continue holding two or three jobs to support themselves. In some cases participants continued to work part-time on their old jobs, and in some cases, their positions were simply not filled, or extra workloads were put on colleagues remaining at their institutions.

All of the research case studies made recommendations. According to the participants interviewed, none of the recommendations were subsequently (within the first year) implemented as policy, except for the study conducted not by one of the trainees, but by the Director of the programme, at the request of UNICEF. The projects undoubtedly influenced thinking on the directions of policy however, because the participants were senior officials, and in some cases there is still the potential that the projects will eventually result in policy change. The current political situation in Cambodia has resulted in the halting of a large amount of foreign assistance.

This project was intended as the first phase of a potential multiphase process of first, building a core team of people qualified to do research and to teach research, then building a network of provincial and district officials who could monitor disease in rural areas, and then providing research training to all of these people. The first phase of the process appears to have been completed successfully. The participants for the most part think that they have a new skill in research, and the potential to pass this on to others.

Without funding for subsequent phases, however, the intermediate intended outcome, of building a network of health researchers at the provincial and district level, and the ultimate intended impact, of improving responses to disease, have made no progress. All of the people interviewed, Thai and Cambodia, said the project would have had a more definite institutional impact, had it a) been longer in duration itself and b) been followed up with a second phase, to provide training at the provincial and district level.

It is important to note that the training for this project took place in English, and the training materials were produced
in English. For the subsequent phases of the project to have intermediate positive outcomes, and an eventual impact, the training must take place in Khmer, and the materials must be translated into Khmer. Progress is being made on the translation of materials by a local NGO, funded by IDRC. WHO has agreed to pay some of the translation costs, and the Cambodian government may provide the printing. The materials to be distributed will be a Teacher's Guide, and book on Basic Epidemiology, and a book on Health Research Methodology.

Plans are under way to distribute all of these to the provinces and district levels by the end of 1997. Recent political conflicts in Cambodia, however, the resurgence of fighting in some rural areas, and the reduction of donor agency operations in Cambodia, may impede this. Ultimately, it is far too early to determine if there will be any substantial strengthening of institutional capacity either to do research, or to improve approaches to disease surveillance, within the Ministry of Health.

The project has been completed for one year, but there is some suggestion that an important institutional outcome has been achieved: that people who participated have been persuaded to commit themselves in their careers to public health. All of the participants were, to some extent, already involved in this, but the project Director, and many of the participants say that the new skills obtained in the project have given them a new enthusiasm for continuing to work in this field, and to continue to improve their skills.

Certainly there is a larger pool of people a) interested in conducting research and b) with at least preliminary research skills in Cambodia, as a direct result of this project. The reach of the project, in Cambodia, however is limited. Direct outcomes have been achieved with only 13 people. The potential for eventual impact on many exists, but will be dependent on funding for subsequent phases of the training, and then on the Cambodian government's willingness to implement recommendations.

The fact that the project was designed with the participation of the Minister of Health, that he is himself a health professional, and that he continues in office despite recent political changes, all are positive factors in assessing the likelihood of future positive impact.

THAILAND

An outcome which was intended by the Thai participants, but not explicitly stated in the project documents, was the improvement of the institutional capacity of the College of Public Health at Chulalongkorn University, to conduct training in research methods. This outcome has clearly been achieved, and in
the last analysis, may be the most significant result of the project.

The Thai staff were clearly motivated to participate in this project not primarily to promote institutional development of the Ministry of Health in Cambodia, but by a desire to test their own professional skills, to experiment with innovative training approaches, and to adapt their own indigenous training methods as a result.

It is clear from the interview with the head of the Thai training team, that participation in this project had direct outputs in terms of the capacity and reputation for training of the College of Public Health at Chulalongkorn University. This was the College's first experience in providing multidisciplinary training and the first experience in providing training in a second language (English). Substantial changes were made to indigenous Thai training programmes, to incorporate the approaches tested in Cambodia. As a direct result of the training, a new programme on "Education in the Workplace" was started in Thailand, at the College of Public Health, Chulalongkorn University. As the Dean said:

"We use the model we developed and tested with the Cambodians for this work. We use local case studies as the basis for the research training for the students. The students have to do research, the same as the Cambodians, to learn. So, we use the local case studies here too, as the basis for developing education models."

The Cambodia programme also laid the groundwork for Chulalongkorn's expansion into international training. One of the Thai trainers later became the Assistant Dean of Education at the university, and is using the Cambodian training programme as a model for a regional Malarial training programme funded by WHO and the Government of Italy. The College of Public Health is currently developing a proposal to do similar training in Bhutan.

5.1.b) Individual Capacity Outcomes

CAMBODIA

There was a general consensus among Cambodian participants that their interest in public health was reinforced by the experience of the training. With the constant political changes in Cambodia, and the concurrent economic disruptions resulting from them, some of the participants may end up leaving the field of public health in order to survive. So, far, however, all of
them remain in the field, and this must be regarded as a positive mid-term outcome of the project.

All of the participants interviewed agreed that their interests in conducting research were reinforced by the training. Most said they wanted to continue doing research, and wanted more training.

All seven of the participants interviewed said they subsequently took leadership roles in research and training projects funded by other donors, including GTZ, UNFPA, WHO, USAID and JICA. This is a positive outcome of the project.

More significantly, and this is the most obvious outcome of the project on the Cambodian side, several of the participants went on to further training. Two went to Thailand, one went to the United Kingdom, and another is doing graduate work in Phnom Penh, all with international funding. All said they would not have been selected for training, had they not participated in the IDRC project. The impact on their lives and careers is clear, and apparently positive, at least in the short term, but it is too early to say whether this positive individual impact will result in any long-term development impact.

It is significant that again, all of the people interviewed, Thai and Cambodian, said that among the most important training contributors to individual capacity development, was the training in English, presentation skills and word processing. Most of the Cambodian students had very little experience in organizing and making public presentations, particularly in English. They said that they had subsequently used these skills of presentation effectively in other projects. Making transparencies, speaking without fear, organizing presentations and materials, were all skills acquired during this training, and highly valued by the participants.

It is interesting that most, but not all, of the participants said that the effectiveness of the training would have been enhanced if either a) more of the lectures had been conducted in Khmer, or translated into Khmer, or b) two to three months of English language training had been provided in advance. Several of the participants said they had problems with some of the Thai trainers' accents when the trainers spoke English. Of those who had subsequently gone on to further training, all said that the provision of short-term English training prior to those studies, had significantly increased the productivity of their training programme, and would have increased the positive outcomes of the IDRC project, had similar training been provided.

THAILAND
The Thai trainers obviously felt that as individuals they had learned knew training skills which they could and were, at the time of this review, applying to other projects, both domestically in Thailand, and internationally.

5.1.c) Knowledge outcomes

Few of the participants thought that the actual research projects they undertook during their training programme would result in immediate policy change. It is too early, however, to say for sure that there was no policy outcome from these studies, because the Cambodian government and international donors are considering the results of some of their studies.

The biggest barrier to sustainable research impact appears to be the lack of funding for research, and the shortage of equipment. Most of the effective training during the project focused on quantitative methods, but computers are in short supply in the Cambodian Ministry of Health, so the participants have not been able to conduct any more quantitative research in the aftermath of the project, than they were prior to the project. Several of the participants said that it would have been useful to have had much more time training on qualitative methods.

Having said this, however, several of the participants said they were attempting to train other professionals on rudimentary research methods.

5.1.d) Practice and Product Outcomes

There is some ambiguity in all of the individual research studies, about the policy impact of the studies. There is also some question about the "practice-related outcomes" of the individual research projects undertaken during training. There is clear potential for impact on practice, however. The eventual impact of the case study on the use of insecticide-impregnated hammock nets, for example, could be substantial, as the recommendation to distribute 200,000 nets was adopted by the WHO and subsequently included in a proposal funded by the ODA. If this project is implemented, up to 200,000 people could be positively affected.

In terms of practice at the intermediate level - research practice, there has been a demonstrable outcome with the 13 participants, all of whom continue to be interested in research, and to apply the new research skills learned during the project.

If this study is conducted again in 12 months, it may be possible to determine if there has been any change in health
practitioner practices as a result of the individual research case studies used as part of the training process.

5.2 Reach

Thirteen health practitioners in Cambodia, plus the director, and four Thai trainers were directly affected by this project, in demonstrable and positive ways.

It is possible that many more people will be affected if the case studies are implemented (see the discussion above) but that remains to be seen. All six of the case studies (five for training, one conducted by the project director) were published in English, in The Cambodia Disease Bulletin, # 6, April 1996. Circulation is unknown.

What is clear is that there has been an immediate effect as a direct result of this project, on up to 50 people in Thailand. These are the people studying under the College of Public Health's outreach programmes at Chulalongkorn University. Whether there is any long-term impact on these people remains to be seen.

In the intermediate term, a number of donor agencies were reached by this project. These donors made use of graduates of the IDRC training programme for the implementation of other projects. Whether there is any long-term development impact as a result of those projects, also remains to be seen. In the short-term, with graduates of this programme participating in the implementation of other donor activities, it appears that there may be some impact on how these projects will be implemented.

Three NGO's in the provinces were reached by the project, because in the aftermath of the project, the National Institute of Public Health provided advice on training, and Khmer-language training materials, developed after the course was completed. It is not possible to determine, yet, how many people (if any) the NGO's have been able to reach with these training materials.

The nature of the reach in this project is interesting. Because this was an experiment in teaching, using field research as a teaching tool, in effect all 13 participants and all four Thai trainers were required to behave in new ways. It is clear that the Thais picked up more than information about the teaching approach. They practiced it, analyzed its components, and have subsequently adapted this for use in other programmes. The reach of this project for the Thai participants has therefore been substantial in degree - it has caused a genuine change in behaviour.
For the Cambodian participants, it is clear also that they think they have learned new information about health care issues, from the research, have new knowledge about how to conduct research, and have developed new behaviours in how they approach problem-solving in their fields.

It is also clear that most, if not all of the Cambodian participants, have developed important new behaviours in the organization and presentation of information, which have already allowed them to move in new directions in their careers.

5.3 **Impact**

If impact is defined as an output or outcome which has "made a difference" then there have been a number of outcomes which could be described as leading to positive impacts on the individual level, in this project. There has clearly been an institutional impact on the College of Public Health at Chulalongkorn University in Thailand. The College has a new way of behaving in its approach to training, which in very large part was a direct result of the staff's experience and learning in this project.

Similarly, several of the participants in this project in Cambodia clearly felt that their lives had been changed positively as a direct result of what they learned in this project. There is too much agreement on this point among the participants for there to be any misunderstanding about the role of the project in changing their professional opportunities. The skills learned in this project, skills of organization, research and presentation, have made the participants, in their own eyes, more valuable in measurable ways to other agencies.

In programme terms, rather than on institutional or individual terms, impact must, in the last analysis be related to the objectives of the project. The objectives of the project were NOT to conduct specific research case studies, but to use case studies as a mechanism to train individuals in research, so they could in turn train others at the provincial level, so that this network of provincial and district officials conducting research, could provide better surveillance of diseases.

By this standard, it is too early to determine if the ultimate impact of better disease surveillance has been achieved. It is even too early to determine if the intermediate outcome of training provincial and district officials will be achieved. This depends on second-phase funding, which has not yet been obtained. At the first stage of project outputs, however, the researchers have been interested, engaged, and transformed at least in part, in their professional orientation, by this training.
6. Enhancement of Outcomes, Reach and Impact

The political and social context of projects conducted in Cambodia is very important to assessment of the reasons why and to what extent impacts were or were not achieved. The Cambodian government has only the smallest capacity to fund its own work, and any project which intends to have an impact on Cambodian society, must take this into account.

This project was intended as only one phase of a potentially three-phase project, which could, if implemented together, lead to the desired impact of better disease surveillance, prevention and treatment. IDRC itself did not intend to fund more than phase 1. But failure to get phase 2 and phase 3 funding either from the Cambodian government (very unlikely, even given the good will of the Minister) or from foreign donors has had a negative effect on the potential of achieving the long-term intended impact. All of the participants interviewed, both Thai and Cambodian, held the opinion that the project would have had a significantly greater impact, had it been funded for phase two, which would have used the staff trained in phase one to provide training at the provincial level, in Khmer.

Adoption motivation is important for implementation in any context. The reasons for participation in the project appeared for the most part to be what the literature on adoption and implementation of innovations refers to as "problem-solving". That is, the participants, both students and trainers, participated in the project, not because they were forced to do so, or primarily because of extraneous financial incentives (although there was one dissenting viewpoint on this) but because the project offered a chance to improve their own personal and professional lives.

The fact that the Minister of Health took a personal interest in the project, was very important to the apparent success of this training programme. His interest provided the justification for senior professionals to leave their full-time work and participate in the project, and to have access to useful data during the field work component of the project. The participants were senior enough, that in many cases they could make their own decisions about whether they could afford the time to participate in the project, and in cases where they were not, the Minister's endorsement of the project provided sufficient justification to release staff.

The fact is, however, that some staff continued to perform some of their regular functions, in addition to participating in the project. In other cases, regular work apparently suffered because of the more or less permanent absence of researchers.
This is not something for which there is an easy answer in project design. Cambodia simply has insufficient human resources to provide replacements in such conditions, or to permit all participants to commit one hundred per cent of their time to such a project. The consensus of participants, however, is that the results of the project were well worth the costs to individuals and to the system, of participation.

The result of the participation of senior staff was hard work, and apparent dedication to the training by both the Thai trainers and the Cambodian students. The post-project enthusiasm for the project is high, in both Thailand and Cambodia.

Using Thai trainers had, from IDRC's point of view a very positive serendipitous outcome: the substantial strengthening of training capacity at the College of Public Health at Chulalongkorn University. It also strengthened relations between the Thais and the Cambodians, which may have long-term positive impact on both countries. On the other hand, the difficulties caused by both trainers and students working in a second language, reduced the immediate benefits of the training. It is clear that a small investment in English-language training prior to the project would have improved the immediate professional outcomes of the project.

In summary then, the fact that this project was designed and the way it was implemented, in a collaborative, participatory manner, with Thais and Cambodians working closely together, increased the motivation of both students and trainers to participate actively, and therefore also increased the mid-term impact of the programme on both Thai and Cambodian participants.

The short-term professional outcomes of the programme would have been improved by the provision of more English-language training prior to the project.

The immediate objectives of this project were never directly related to implementation of the individual research projects, which were undertaken primarily as heuristic mechanisms in the teaching of research methods. The long-term impact on health care could have, and might still be substantially increased by the provision of funding for phases 2 and 3 of the project.

7. Case Study Process

The quality of data obtained for this review was constrained by issues of language and limitations of time. The full five days were required for interviews in Bangkok and Phnom Penh, and even then, only 7 of 13 participants were interviewed (in addition to the project director and chief trainer). More time
for the study would have provided an opportunity to interview more of the participants, and to extend the interviews to donor agencies with whom many of the participants subsequently worked on research projects, apparently as a direct result of the training they received during this project.

The most obvious problem in defining the impact of this study, is that the project was only recently completed, and in even the best of circumstances, it is highly unlikely that long-term impact could be judged this soon.

On the other hand, the recent completion of the project meant that all of the people interviewed had the processes and results of the project firmly in mind, and were able to provide some analytical context for their assessment of the results of the project.

8. Summary of Outcomes and Impacts

1. Outcomes

a) Institutional

New capacity and training approaches at the College of Public Health, Chulalongkorn University, Thailand.

13 professional staff with apparently increased commitment to work in public health in Cambodia.

New and apparently effective professional relationships between Thai and Cambodian participants.

b) Personal

Substantial new career opportunities for Cambodian participants.

New skills of English, data organization, research and presentation among 13 Cambodian participants.

New training skills among Thai trainers.

c) Policy and Practice

Too early to assess.
ANNEX

A. Documents Reviewed


IDRC Project Summary, August 1994.

Monitoring Memo - Annette Stark, TR2/95, June 1995


Project Completion Report, FIS # 894005

B. Dates of Interviews; Persons Met

Bangkok - June 17-18; July 3-4; August 16, 1997
Phnom Penh - June 22 - July 2, 1997

Dr. Chitr Sitthi-Amorn, M.D.
Dean, College of Public Health, Chulalongkorn University, Thailand
Tel: (662) 218-8192

Dr. Oum Sophal, M.D.
Director, National Institute of Public Health
Ministry of Health, Phnom Penh, Cambodia
Tel: (855-23) 360-523 (Dr. Sophal is primary contact for all other interviews)

Dr. Khun Sao Rith, M.D.
National Tuberculosis Centre
Phnom Penh Cambodia (Contact through Dr. Oum Sophal)

Dr. Tieng Sivanna, M.D.
National Tuberculosis Centre
Phnom Penh, Cambodia (Contact through Dr. Oum Sophal)

Dr. Tiv Say, M.D.
National Maternal and Child Health Centre
Phnom Penh, Cambodia // Tel: (855) 15-915-007

Dr. Ou Kevanna, M.D.
ARI Working Group
National Maternal and Child Health Centre
Phnom Penh, Cambodia

Dr. Tho Sochantha
Chief of Entomology section
National Malaria Centre, Phnom Penh, Cambodia
Tel: off: (855-23) 362-241 // cell:(855-17) 813-031 // Home: (855-23) 725-993

Dr. Chan Soriya
National Institute for Public Health
Ministry of Health, Phnom Penh, Cambodia
(Contact through Dr.Chitr/Bangkok or Dr.Oum Sophal/Phnom Penh)

Dr. Yv Ek Navapol
National Institute of Public Health, Phnom Penh, Cambodia
Tel: (855) 23-366205
D. Interviews:

All interviews conducted in English. (Paraphrased unless otherwise indicated).

Interview #1

Dr. Chitr Sitthi-Amorn, M.D.
Dean, College of Public Health
Chulalongkorn University

Background: He was the chief trainer on the project. Then and currently Dean of College of Public Health, in Thailand's most prestigious university, Chulalongkorn.

Q: Why did you decide to undertake this project:

A: It was a request from Dr. Oum Sophal, and I thought it was interesting. IDRC asked me to participate. I read the documents, and I agreed.

Q: What benefit would you get from doing it?

A: We were preparing to develop the College of Public Health at that time, preparing new programmes, and I wanted to test the idea of experience-based training, to see if it worked better. We thought it would work, but we needed to test it. When the Cambodia project was conceived, I thought this was a good opportunity, because if it worked there, where conditions are very difficult, then it should work here too, where it is much easier to put people into the field, to get the experience, because it is not dangerous, and there are good roads, etc. I wanted to see what was easy, and what was hard, and how to design a strategy for this training, which could make it more effective.

Q: Has this project then had any effect on your work in Thailand?

A; Oh, yes. We learned how to integrate many disciplines and how to work in another language too. That is important to us, because we have to train people how to work with minority language groups in Thailand, how to design training programmes in another language for use in Thailand too.

Q: What were your objectives?

A: Our goal in this project was capacity development. We wanted to train trainers, who then could train other people.

Q: What was the most important factor in the project for you?
A: It was the selection of the participants. We had only a very small number of participants, but they were all carefully selected. They were the most important people in each division where they worked. The ones who could make a difference. So we had two or three of the best people from the Centre for Hygiene, and two or three of the best from the Maternal and Child Health Centre, and from the National TB Centre, and from the Malaria centre, and they were all highly motivated. Most important was that they all had some knowledge of English, because this would have been impossible without it.

Q: How did you conduct the training.

A: It was almost all discussion-based. We had a few lectures over the months the training took place, but not many. We basically tried to have people discuss the issues, and try them out, and come back and exchange ideas about what worked, and what did not.

Q: Did the Cambodian students end up with any new skills?

A: Yes. They learned to do research, which they really had no experience with before. They also learned how to make presentations. At first they were very nervous and did not know how to organize the material, or make overheads, or even how to speak in public. But when they practiced in the group, and developed their proposals, they learned how to do these things in the group, and later they were able to make good presentations of their findings to a much bigger group. I think this is very important, because it helped their confidence a lot.

Q: So, if you were to summarize the results of the project what would the most important outputs be?

A: First, they learned how to work together. Second, the experience-based training model was validated for us, and we were able to use it extensively in Thailand. Third, the students got a lot of new confidence in themselves. Fourth, I think it improved relations between the Cambodians and ourselves, because it gave us both contacts in each others' countries, and we still stay in contact with each other. The biggest output in Cambodia, however, was they learned how to work together, which is something they do not seem to do very much there. We built a "society of learners" there, and it was very good.

Q: So, what will be the long-term impact?

A: I don't know at all. There is no phase 2 funding, but they definitely need it. I think GTZ is interested, however, so something may happen.
Q: Was there any Cambodian animosity to the idea of using Thai trainers?

A: No, they seemed to welcome us.

Q: What impact did this have on Thailand?

A: A lot. Perhaps more than on Cambodia. We had five staff directly involved, and they learned a lot about this approach to training. One of the participants is now Assistant Dean of the Faculty of Education [at Chulalongkorn] and is using these experience to adapt training methodologies for a regional Malarial training programme paid for by WHO and the Italian government. They used the Cambodian training as the model for developing similar training approaches in other countries.

Q: What was the biggest problem in the training?

A: Language. We taught in English, not Thai or Khmer. Many of the students did not have a good grasp of English when we started. It improved later, but at first it was a problem.

Q: If the training was useful, why do you think it had an impact?

A: Because it was meaningful to the students. It was not some academic exercise. It was based in real data that each of them had to work on in their jobs, in immediate problems they had to deal with. These were not junior people. They were all people with real professional responsibilities, and they did not want to waste their time. It had an impact because the training was related to real policy issues. Also, our agenda was not the same as many donors. The Thai objective was just to permit the Cambodians to develop their own capacities. We had no other hidden objective. Their country is going through reconstruction, and they need to build up their self-confidence. That may be more important than any specific skills.

Q: If you had the opportunity to start again on this project, to do it again, what would you change about it?

A: I would make it a much longer project. It was too fast to cover all of the issues. I would have more phases in the training, in between letting them get back to work. Also, I would bring in their bosses from time to time. I would gradually bring in more policy questions during the training, for further research.

Q: What kind of followup has there been since the project ended?

A: I have provided information to Sophal [the primary Cambodian staff member] on how to get DTEC money through the Ministry of Foreign Affairs, because to be useful, there should be followup.
Q: Has he done that?

A: Well, some of the people who were on the course went on for further training. There are two in Bangkok now, and one went to London. So, I think there was followup. But a long-term relationship between us and the Cambodians is what is really needed to sustain the impact.

Q: What about results for the university - for the Thai side?

A: We are now thinking of a regional role for Thailand in work like this for WHO. We have been approached to assess the viability of continuing the local WHO regional office. I think they take us seriously because of the work we did in Thailand, so that may be why they want us to do it. I think also, working with the Cambodians, made me think more about Thais interact with other countries. We need to think about this more. But the most immediate result was the establishment of a new programme at Chulalongkorn University, on "Education in the Workplace". We use the model we developed and tested with the Cambodians for this work. We use local case studies as the basis for the research training for the students. The students have to do research, the same as the Cambodians, to learn. So, we use the local case studies here too, as the basis for developing education models.

Q: How many people are being trained here in Thailand?

A: 50 people will be enrolled in the distance education programme using this approach. 30-40 more will be trained in two years in classes. I want to use these same people after the training, as field supervisors for work in other countries where we can do the same thing, use the same model. We may be working in Bhutan, for example.
Interview # 2
Dr. Oum Sophal, M.D.
Director, National Institute of Public Health
Ministry of Health
Phnom Penh

Background: He wrote the original proposal. He has had training over the past 15 years in Hanoi, Paris, Atlanta and Australia. At the time of the project, Dr. Oum Sophal was the Director of the National Centre for Hygiene. He selected the staff for training. During a subsequent reorganization of the MOH, he became Director of the National Institute for Public Health.

Q: How did this project originate?
A: I had been studying in Liverpool on epidemiology and statistics, and I saw the IDRC proposal guidelines in the library there.

Q: Did you get much support from senior policy makers for this proposal?
A: Yes, the Minister of Public Health in Particular, was very helpful. Between 1979-82 I worked in a hospital, and the Vice-Minister of Public Health asked me to move the National Centre for Hygiene. So, I knew the Minister from before, and other senior policy makers, and when I made the proposal they were supportive. Also, the Minister is a professional health worker. He studied in France, and he has a professional orientation, and also personal confidence in me.

Q: Was that support important to how the project evolved?
A: Yes. Because the Minister supported it, we had people participating who were very senior, from other offices in the Ministry. They could see this was a priority and it was easy to get senior people to participate. Also, because the Minister supported it openly, it was much easier for participants to get time off, and to get cooperation when they went into the field to collect data.

Q: What was the background of the people who participated?
A: Most had practical experience, a lot of practical experience, but no academic training in research. Most had 3-4 years of experience at a minimum, in public health. One of the participants was from the Ministry of Rural Development, but in fact, he was a health worker who had applied to transfer to the Ministry of Health, but could not for some reason.
Q: So, who originated this project then - you or the Thais, or IDRC?

A: Oh, it was our project. We started it. It was our idea. IDRC just provided the money and when we wanted it, they gave us good advice, but they never interfered with us. And the Thais, Dr. Chitr, they gave us technical assistance. You know, most health projects in Cambodia have expatriate directors, but not this one. I was the director. We did not want to spend a lot of money on an expatriate.

Q: Did you have previous experience managing projects?

A: Yes, I managed a WHO project and UNICEF project, which were about $300,000 per year. I also managed other projects, and this affected how I designed this project. Also, my training in France affected how I thought about the training. I have had a strong motivation for training staff, since 1983, when I became Vice-Director of the Centre. In 1985 I organized training for staff, using research in the field, but two students were killed by a mine, and we terminated the training then. That was the first time we tried a more participatory training approach. Previously our courses were more traditional, based on the Vietnamese approach to training on epidemiology, not on field research. So, the French experience let me see that field research could be effective as an approach for training.

Q: Is that where you came up with the participatory orientation for the training?

A: Not exactly. That came from my training in Liverpool and Australia. In Australia, in the MPH programme, I had to do a three-month field research project and defend it, and had to take seminars and workshops also. I found all of this helped me learn.

Q: Why did you decide to use Thai trainers?

A: Annette Stark helped me with that. She knew them and suggested they might be useful. It was a very good suggestion.

Q: What followup has there been on the project?

A: A lot. Other centres are now doing surveys, using the training by their staff. For example, the Maternal and Child Health Centre is doing work. Three of the participants in our Centre who took the course went to study elsewhere. One student (Yv Ek Navapol) worked on an ODI project with a researcher from the London School of Hygiene. I think they picked him for that project because of his experience with this project. He is now studying in Bangkok at Mahidol University. Another student, Dr. Chan Soriya, who became the team leader for data on survey for...
basic health needs for 12 provinces, is also studying in Bangkok now. She was selected by GTZ. She helped them develop a questionnaire on demand for health care in Cambodia, that was a direct result of her IDRC project participation. She became the team leader for the GTZ project because of her IDRC training. She knew Dr. Chitr also, from that training, and after she finished the work for GTZ they selected her for further training in Bangkok. But, you know, before the IDRC project she never had any experience in research. Dr. Mon Roth, was the third staff member who went on for further study. He is also on a GTZ study course. He is now on a Master Trainer course, one-year diploma programme, which is taking place in Phnom Penh. It will finish in September, and then he will work for GTZ as a Health Management training organizer for three provinces.

Q: So, why do you think these three were selected for training? Did it have anything to do with the IDRC training?

A: It had everything to do with the IDRC training. They developed computing skills. They could write on the computer. They improved their English skills in this project, so they can study with other groups. And they improved their public health knowledge and research skills. If they did not participate in this course, I think they could not go to study on these other courses. The fourth member of our staff, Dr. Chhorn Veasna, has moved from our Institute. After the reorganization responsibility for the Cholera programme moved to the MCH Centre, but the Director of the MCH welcomed him there, because he had done good work with us. I am proud of the results of this project.

Q: What other followup has there been, aside from people going to study elsewhere?

A: There was no funding for a second phase, so followup is difficult. You know that the Cambodian government has almost no money for operations, so it is difficult for us to fund separate activities by ourselves. I am trying to obtain government funds, however. I am responsible also for public health training programmes at the Medical School at the University of Phnom Penh, so I am trying to use the techniques and the information developed during the IDRC project for training at the University. I have had the IDRC training manual translated into Khmer by Lidee Khmer. IDRC paid for this. This is necessary for training district-level staff, who cannot read English. We are using three manuals - a Teacher's Guide, a book on Basic Epidemiology, and a book on Health Research Methodology. WHO is funding the translation of this last one, and the Government of Cambodia will print them all. We will distribute all of these materials to the provinces and districts by the end of 1997. So, I think this is some followup, and it has been useful. Also, as a second step,
we hope we can get funding for workshops at the provincial and district levels, where we will use all of these materials.

Q: What was the overall objective, the broader goal of this project? Why did you want to train people in research methods?

A: We wanted to improve disease surveillance in the provinces. Until 1995 each department or centre had its own separate surveillance system for each disease - so the Malaria Centre did its own, and the Cholera centre, and the MCH. But the MOH decided that one system, not 10 or 20, was needed. And the IDRC project fit into this.

Q: Was this a result of IDRC advice?

A: No, the Ministry of Public Health wanted to do this.

Q: So, did the system improve?

A: Marginally. But this will take a long time. The project just finished. We need followup.

Q: Why was the Centre reorganized?

A: The Minister wanted to improve coordination among agencies. So, the National Institute of Public Health will be responsible for coordination, and training, staff capacity development, but no operations. The other departments are worried that the National Institute of Public Health will take over training programmes from them, so we have to be careful. This is why it is difficult to trace the organizational effect of the IDRC project, because of the reorganization.

Q: What was the most important result of the project?

A: We did what we wanted to do at stage 1. We trained core staff, who are now skilled in research. We also persuaded people to commit themselves in their careers to Public Health, despite the limitations on salaries and everything else. This is important for the reconstruction of Cambodia. The second benefit was that the project left equipment with us. IDRC was the first to support research training here. We got printers, computers and copiers, and this is important, because we never had them before. That equipment helped many of our staff, and the staff in other agencies, which despite projects, get little equipment, it helped them continue to function and do their jobs. The third result was that we were able to provide advice to NGO's three of them, working in the district levels, and we can give them the Khmer-language material which came from the course.

Q: Were there any problems as a result of the project?
A; Yes, in the short term. We lost three of our staff, who went to study further. Three of our best staff, because we selected our best staff for the IDRC project.

Q: What needs to be done now?

A: We need a second training session, using these staff, to train people from the provinces.

Q: Did the project increase communication between the agencies participating?

A: Somewhat. Not between their bosses, but between the people who participated. I think now they talk to each other, because they studied together for months.

Q: What policy impact has there been, from this project?

A: The report was published in English and Khmer, so this increased awareness. I think this will have a result, eventually, but we cannot say for sure.

Q: If you could change the project and do it again, what would you do?

A: I would use Khmer-language training material, translate the material before the course, and let the staff read it before the classes, because their English was not good enough for them to get all of the substance of the classes. I would also use local data as the basis for the training. This would take more advanced preparation, however. Also, I would use interpreters. The training could be in English, but I would summarize it in Khmer after each module, to check on the understanding of the students. Language was the main barrier to effectiveness.

Q: What was the biggest strength of the project?

A: It was experimental. It showed us that experience-based learning could be effective. It will affect how I do training in the future at the Institute.

Q: What was the biggest weakness?

A: I think we should have looked at qualitative research as well as quantitative. Qualitative research is quite different, and we could not have done it at the same time. We need a separate training programme on qualitative research.
Interview # 3
Dr. Khun Sao Rith, M.D.
National Tuberculosis Centre
Cambodia
(Contact through Dr. Oum Sophal)

Dr. Tieng Sivanna, M.D.
National Tuberculosis Centre
Phnom Penh, Cambodia
(Contact through Dr. Oum Sophal)

Background: This was a joint interview, with the two participants from the Tuberculosis Centre. The two participants collaborated during training, on a study of TB treatment courses. English skills were rudimentary and the interview took a long time to cover limited data. The Tuberculosis Centre is in a very old, dilapidated building, with frequent power failures, and no new equipment.

Major points covered in the interview:

1. Motivation for participation in the IDRC training:
   It was a good chance to upgrade skills. The Minister supported it.

2. Followup to the study the two participants did on treatment regimes for Tuberculosis. Utilization of the results of the training:
   There is no money available for followup studies. Some followup should be done, but there are no resources.

3. Dissemination of the results of the study.
   No, because there is no budget for printing. The system is very centralized. There is no budget for meetings, either.

4. The best result of the project:
   Dr. Khun:
   - Increased motivation to do further research.
   - Desire to build provincial capacity for disease monitoring
   - Now realizes that curative medicine is not as important as preventative medicine. This has provided new priorities for work.

   Dr. Thieng:
Better interaction with staff of other agencies participating in the training, however, lack of organized followup has hampered this.

5. What were the biggest problems of the project?

- Time lost from operation for those participating in the training. No replacement costs were covered, so there was nobody to do the work of those who participated. The work just did not get done.

6. Followup problems

There is only one computer at the Institute, so they cannot really follow up on quantitative research. They have no budget to follow up with provincial counterparts. In some provinces field research is still difficult because of mining of the roads.

7. Conduct of the course

No need for interpreter. Understood the English. [Interviewer's note: This is hard to believe, given the difficulty of communication during the interview].

The best part of the training, however, was not the class time, but the field research. Perhaps this explains the enthusiasm, despite the language issue.

8. Suggestions for improvement

Should build in a phase 2, and train people at the MPH level.

Give the participants an opportunity to do field work in Thailand, so there could be more direct supervision by the Thai staff - Surin might work, because of both Thai and Khmer language capability.
Interview # 4
Dr. Tiv Say
National Mother and Child Health Centre
Phnom Penh

Dr. Ou Kevanna
NMCH

Background: These were two of three participants from the MCH Centre. They collaborated on a case study on nonutilization of antenatal services. Communication in English was difficult during the interview. The MCH is a heavily-funded, modern centre.

1. Motivation
Both were motivated by a desire to improve research skills.

2. Outputs of the training
Dr. Ou went to Stung Treng province after the IDRC project, to work on a USAID funded study on MCH practices. Dr. Ou is now participating in other research projects as well. "The result of the project was beautiful for me", she said.

Dr. Tiv has used the research skills gained in the project with a JICA financed research project on alternative health care, in 5 provinces. Found that the SPSS training obtained in the IDRC project was very useful.

Both doctors now work on several workshops both in Phnom Penh and in the provinces, training directors of MCH centres on some rudimentary research methods and on substantive issues. Both the research component and some of the substantive outputs are being used. Dr. Tiv is now doing research on abortion, for UNFPA, using the skills learned in the IDRC project, and participating in the JICA project. Would not have participated in this, if had not first done the IDRC training.

3. Problems
Dr. Ou says an interpreter would definitely have improved the effectiveness of the seminars. Also needed followup on SPSS training, and more time on analysis of data. The Thai trainers had good technical skills, but their English accents were sometimes hard to understand. They also did not really understand the policy environment in Cambodia.

Sometimes the participants were called away from the training to do emergency work at the hospital. Therefore, some consideration should be given to providing training out of the country.

4. Recommendation
Prior to training, two or three months of English-language training should be given.

Ask IDRC to send them books on research methods, and research reports.

5. Most productive skills gained:

Presentation skills - how to make transparencies, how to speak without fear, how to organize presentations. Both have used these skills many times since, and this has had a very positive effect on their work as trainers.
Interview # 5
Mr. Tho sochantha
Chief of Entomology
National Malaria Centre
Phnom Penh

Background: English better than some of the other participants. National Malaria Centre is located in a poor building.

1. Motivation:
He wanted to learn how to develop project proposals, because he thought this was the only way to develop his career and the work he was involved in.

2. Problem identification
He had been working on the effectiveness of mosquito nets and had recognized the potential of hammock nets to reduce malaria among migrant workers who sleep in the fields. The problem he had was that there were no statistics available on the use of the nets.

He therefore chose this as his study, during the IDRC project. He examined utilization of mosquito nets in Pursat province and found that despite use of the nets increasing, the number of cases of Malaria also increased. The reason was that workers did not take the nets with them to the field, where they often stayed for 2 or 3 weeks at a time. Therefore recommended to the government, to provide hammock nets for people working in the forests.

3. Impact
WHO is studying he recommendations and he has proposed to them that they fund the distribution of 200,000 hammock nets. The WHO representative included this in a larger proposal, and ODA eventually funded it. So, 200,000 people MAY have been affected.

4. Other outputs of study
Developed new research skills. participated as a researcher in another project funded by ODA. He recommended some of the recommendations he had made after the IDRC study, and some were adopted.

5. Problems
The current ODA study needs qualitative data to determine why and how people use or do not use nets. The IDRC training was on quantitative data only. Therefore, would recommend that the next training focus also on qualitative data collection.
Two of the Thai professors were understandable, but two of them were very hard to understand because of their accents when they spoke English. The English expert was easily understandable.

6. Most useful skills

Proposal writing. Has used this several times subsequently. Also - presentation skills, writing skills.

Because there is no funding for his centre, the research skills are currently less important than these other skills.

7. Personal impact

If he had not participated in the study, he would not have completed his MSC at the University of London. He had been selected prior to his participation in the IDRC project, and the skills he picked up - statistical analysis, word processing and basic computer skills, helped him complete the degree.

8. Recommendations

Do not use an interpreter for Khmer, use a Khmer instructor, OR provide English-language training first.

Money should be provided for a phase 2 of the course. Some certificate or degree should be awarded, because these things, even though formal, are important so that other people in the health system will recognize the time spent on the course, and the knowledge and skills learned. He would like to suggest to IDRC that participants continue to get an MSC.

There should be more time for the course. More than 3 months is required for the theory. More time is needed for field research too, and still more for followup. All of the participants need the opportunity to lead their own projects, and it would be useful to build this into a course.
Interview # 6
Dr. Chan Soriya
National Institute for Public Health
Ministry of Health
Phnom Penh
Cambodia

Background: Worked for the Centre for Hygiene and Epidemiology before conversion to the National Institute of Public Health. One of four staff members participating in the IDRC project. Did a case study with Yv Ek Navapol on Dengue fever treatment. Interviewed in Bangkok where she was on a WHO course at Chulalongkorn University. Good English.

Q: Why did you participate in the IDRC project?
A: Because Dr. Oum Sophal told me it would be good for me and for the Centre. I wanted to learn how to do research too.

Q: Did you use the knowledge you gained in the study you conducted in your subsequent work?
A: Not as much as I wanted to, because after the course, I changed my work. I started to do more administration, and less research. But right after that, I participated in a GTZ project on "Health-Seeking Behaviour", part of a WHO project too. I was a consultant for WHO in Vietnam and the Philippines too, and a field team leader.

Q: Why did they ask you to join these projects?
A: Because of the IDRC project. I gained a lot of confidence in that project. I realized that this was something I could do. Normally they would not ask you to participate if you had no experience, but I did have experience with the IDRC project.

Q: So, you think the IDRC project affected your career?
A: Yes. That is why I am on this course now. GTZ got to know me, and the people in WHO, because of my IDRC work, and then my work with them, so then they selected me to study for one year in Bangkok. That is because of the IDRC project.

Q: Did the project have any affect on policy? Were there changes made as a result of your case study, on Dengue fever?
A: No. There were no changes. We had no money for follow up.

Q: Were there any problems with the IDRC training?
A: Yes. The field work was very useful, but the training on design was not so good, because, not because of the content, but because I could not understand it all, because all of the lectures were in English, and at that time my English was not very good.

Q: But now you are studying in English here in Bangkok.

A: Yes, but they let me study English for three months before I started this course. That was very good, and it means I can understand more of the theory. I still have some problems with the technical words, but I understand more.

Q: So, do you think that would have helped in the IDRC course?

A: Yes. If we could have studied English for a few weeks, we would have understood much more of the theory. Either that or teach the course in Khmer. But English was better, and better for us too. "It was good, but it could have been better."

Q: Was the problem that you did not understand the English, or did you not understand the English of the people teaching you?

A: Both. Dr. Chitr was OK, and so was the teacher from the UK. But the other Thais had very strong accents and it was difficult to understand them sometimes.

Q: Any other problems?

A: I think the course was too short. Because we had problems with our English, it took us a long time to understand. We should have repeated the discussions on some topics two or three times because of this, but we did not have time. But, I think it was OK. We learned a lot. We could have used one more month on each step of the course, but it was OK, because we were studying full-time, and this let us concentrate on the studying. I did my field work close to Phnom Penh, too, and that helped. If I did the work further away, I think I would have needed more time.

Q: Do you have any suggestions about how this course could be improved?

A: I think the professors should try to understand the level of their students, and make the course based on the level. We had different levels of understanding. Different levels of English. The teaching should not use very complex terms. They used examples, and they were good. That helped us understand.

Q: Which was the most useful component of the course?

A: The field work. I learned most there.
Q: So, did you use any of the skills you learned in the course, after it finished?

A: Yes. I was the trainer in the GTZ-WHO project on Health-Seeking Behaviour. I divided the group into four groups, and I taught the four team leaders in Khmer.

Q: What did you teach them?

A: I taught them how to do research, the same as I studied in the IDRC project. I used the participatory techniques that I learned in the IDRC project. I taught 16 interviewers in class rooms and in the field too, how to design the study, and how to conduct interviews.

Q: Did you use the skills anywhere else?

A: Yes. I spent one month in Japan, with a JICA project, learning more about statistics. I could not do that, if I did not study this subject first with the IDRC project.

Q: So, if you were to summarize, did the IDRC project affect your work?

A: Oh yes. I used many of the skills I learned there, and I would never have been the trainer in the GTZ project or I would never have been selected for this course, if I did not participate in the IDRC project. For the policy, I do not think it affected anything. But for my work, it had a big effect.