

Strengthening **T**herapy in **O**rder to reduce **P**overty
Tu**B**erculosis
Project



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I ORGANIZATION SEEKING FUND

I.1 VOR ORT e.V.

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I.2 Organization

Founded on May, 23rd 2001
Register number VR 1314 Brühl

VOR ORT e.V. is a charitable German non government organization. The head office is in Brühl, Rheinland, NRW. VOR ORT was founded in 2001 with the vision to ensure the realization of article 25 of the HUMAN RIGHTS that declares the right to a standard of living adequate for health and well-being.


VOR ORT believes that only through improving access to health and social services there will be a sustainable solution for poverty reduction and consequently a better world.

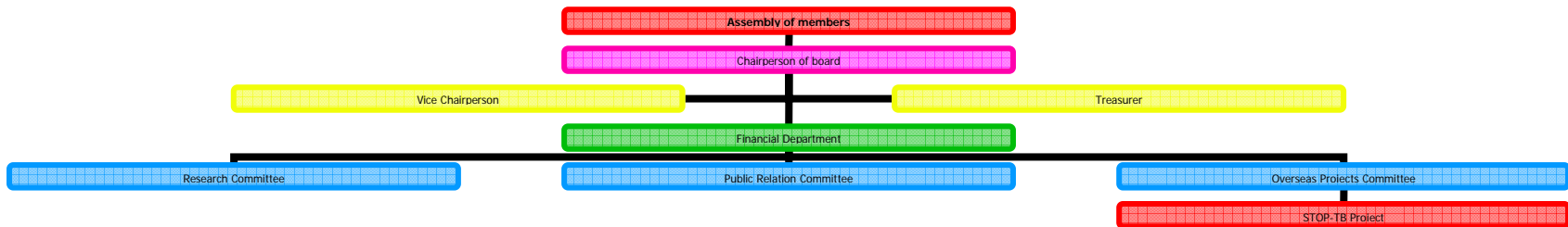
Cambodia is the organization's primary target country where VOR ORT aims to aide The Royal Government of Cambodia to improve the health of the Cambodian people in order to contribute to socio- economic development and poverty reduction.

VOR ORT signed a Memorandum of Understanding with the Ministry of Foreign Affairs in Cambodia on November, 28th 2002 and the Ministry of Health on November, 30th 2004.

Founding members of the organization have several years experience working in the government health system in Cambodia and thus, understand the challenges facing the Ministry of Health in implementing health sector reforms, especially in the remote and ethnically diverse regions of the country.

Since March 2004 VOR ORT is implementing the “Tuberculosis Therapy and Awareness Raising Project” to support the NTP in Ratanakiri Province.

 Organization chart:



1.3 Contact information

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II PROJECT DESCRIPTION

II.1 Title of operation:

STOP- TB (Strengthening Therapy in Order to reduce Poverty - Tuberculosis) Project

II.2 Location of operation:

Kingdom of Cambodia, Ratanakiri Province

II.3 Start Date:

January 2006

II.4 Duration of project:

36 months

II.5 Introduction:

Since June of 2001, VOR ORT has been evaluating the needs for assistance to the health care services in Ratanakiri Province.

In cooperation with the National Tuberculosis Program (NTP) and the Provincial Health Department (PHD), taking input of employees and patients of the Ratanakiri Referral Hospital and all district Health Centers, as well as international and local NGOs in consideration, VOR ORT developed a concept to support the NTP in the special multi-ethnic circumstances of Ratanakiri.

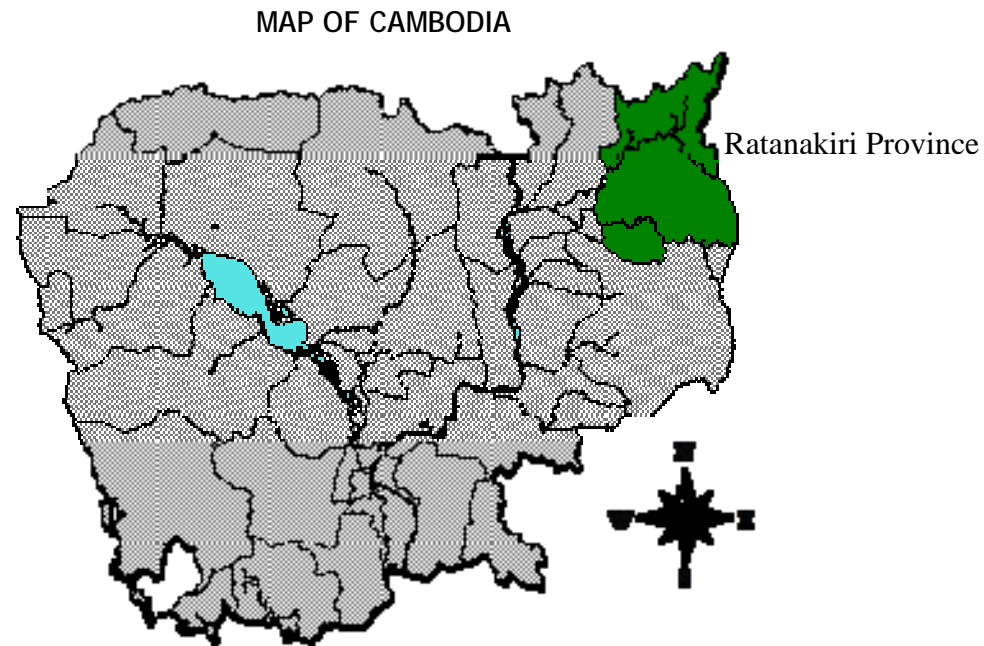
To provide an overview about the general situation, current problems and threads for TB diagnosis and treatment, and the level of awareness about tuberculosis among different ethnic groups in Ratanakiri Province, VOR ORT carried out an assessment of the Tuberculosis situation in Ratanakiri in April 2002 and a survey to collect baseline data in TB treatment centers and communities of five different ethnicities prior to full implementation in November 2004.


To assist in the decentralization of DOTS to community level the Tuberculosis Therapy and Awareness Raising Project designed the extension of activities called:

STOP-TB

(Strengthening Therapy in Order to reduce Poverty- Tuberculosis)

II.6 Background



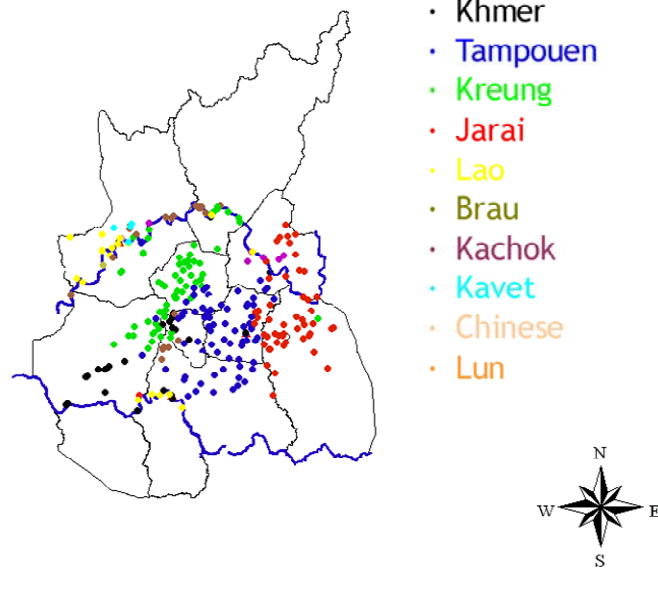
 Demography:

The remote north-eastern province of Ratanakiri which borders Laos to the North, Vietnam to the East, Stung Treng province to the West and Mondolkiri province to the South, is one of the least developed areas of Cambodia, due to problems of accessibility.

In this hilly, forested region approximately 110,000 people live in small towns and villages scattered over 11,050 square kilometres. Simple dirt roads or paths lead from villages to district towns and from there to Ban Lung, the provincial capitol (population estimate to be 12,000).

Ratanakiri Province is made up of several ethnic groups: 23% Tampuan, 19% Jarai, 16% Krung, 7% Brou, 3% Kajok, 1% Kravet and the Lun (one village) often referred to as "Khmer Leu" or "Hill Tribes". Since several years there is an increasing number of Cham (1%) people as well. Lao (11%) and Chinese are minorities who have lived in the north east of Cambodia over many centuries. Khmer (17 %) and increasing through in-migration) and Vietnamese are the main inhabitants of the provincial capitol Ban Lung as well as settlements along the national roads. (Dept. of Environment 2001)

Ethnic Groups



The "Khmer Leu" live in small, remote villages composed of 150 to 400 people. They practice swidden agriculture or rotational shifting cultivation as well as hunting and gathering for subsistence. Occasional surpluses are sold in the local markets in exchange

for consumer goods such as mats, pans, steel tools, tobacco, salt, fish paste or medicine. A visit to the local market usually means a day of walking for an individual.

The baseline survey conducted by VOR ORT in November 2004 found that:

“The overwhelming proportion (93%) of the individuals asked makes their living through agriculture. A quarter (26%) of interviewees stated to have no cash income at all, neither monthly nor annually. 58% cultivate only a farm area of 1,5 ha or less. Due to the fact that upland rice farming has much less productivity than paddy rice farming, a size of 1,5 ha is usually not enough to make the living for a family with many members. For 55% of the households screened in the survey consisted of 7 family members or more.

[...]

Most villages have only schools that teach up to grade 2. For pupils who want to study higher grades the family has to arrange a living for them in district centers, which is unmanageable for most of them due to financial constraints. Thus especially the girls receive in general only a low level of education. In the survey it was found that a total of 29% of families have not one member who is able to write or read. And 31% have only one person in their family literate.”

All of the indigenous groups have their own distinct languages which are often not mutually intelligible and the majority of them, especially women and the elderly do not speak Khmer. Culturally, these groups are more related to other ethnic minorities in Laos and Vietnam, than to the Khmer.

“There have been a number of studies and reports related to the socio-cultural characteristics of the various ethnic groups in Ratanakiri. In general, the worldview of indigenous people in Ratanakiri is dictated by their animist spiritual beliefs. In animism, the forces of the world are believed to be controlled, managed, and protected by spirits that reside in the natural world.”
(Indigenous Communities and Development in Ratanakiri, Allistair Stephens and Graeme Brown)

Their concept of sickness and health is closely interwoven with their religious beliefs, so sacrificial rituals to the spirit world are often the cure of choice. When they seek the help of the government health sector, it is often already too late.

Health Situation

Ratanakiri has only one Operational District (OD) that has been contracted to the international NGO Health Net International in November 2004.

Due to the low population density in the province the one referral hospital in Ban Lung is the only facility, that is implementing the complementary package of activities (CPA) for all inhabitants of Ratanakiri. Only here, people can be examined by a medical

doctor and undergo further diagnostic investigations. On the district level, ten health centers, which are largely staffed by primary nurses, provide the minimum package of activities (MPA). Three of these health centers also offer hospitalized Direct Observed Treatment Short-course (DOTS) and are microscopy centers for sputum smear examination. Since end of 2004 all Health Centers and also the eleven Health Posts are supposed to provide ambulatory DOTS according to the new six month treatment regime.

The quality of the services provided by these institutions relies heavily on the capacity and motivation of individual staff members. The expertise of these employees was extremely low, and many of them interviewed during the assessment in 2001 mentioned that training, if they received any, was then often too advanced for them to understand.

According to NTP statistics, Ratanakiri has the lowest case detection rate in Cambodia.

New smear positive cases in Ratanakiri per year:

Year	New smear positive cases
1999	47
2000	55
2001	33
2002	31
2003	N/A
2004	52

(Table 1 source: Annual TB reports NTP)

These figures are all extremely low compared to the estimated incidence rate of 241 per 100 000 inhabitants per year (1999-2004. Since 2005 the incidence is estimated to be 225 per 100 000 inhabitants per year).

Health Unlimited (HU) - an international NGO working in the province since the early 1990^s - conducted a Health Situation Analysis survey in the province in November, 2001 which led to the following conclusion:

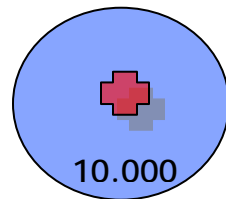
“HU examined 677 persons, of indigenous sample households and registered a total number of 19 persons (2.8%) with a cough of blood, which means that they have a strong possibility of having pulmonary TB. Further more HU registered 55 persons (8, 1 %) with cough longer than three weeks. Therefore, in the sample, the overall percentage of suspicious cases for TB is 10.9 %. The rate of new smear positive cases per year in Cambodia is 0.24% (241 per 100 000) and the overall rate is 0, 54%. The suspected rate for the areas sampled in Ratanakiri, at a minimum of 2.8% (2800 per 100000) is therefore very high.

TB must be seen as a high-risk disease in Ratanakiri.” (Dr. Fiona Hardy, HU Health Situation Analysis Ratanakiri Nov.- Dec. 2001)

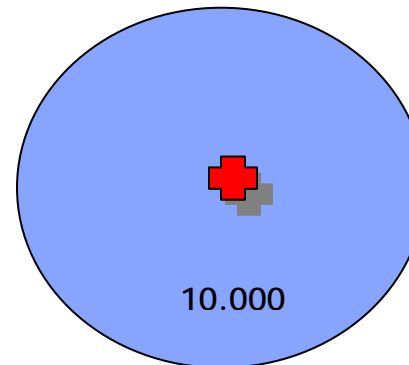
● **Main obstacles implementing DOTS services in Ratanakiri**

There are a number of factors constraining people in Ratanakiri from accessing timely diagnosis of TB, and its treatment. Being all closely related to the poor socio-economic situation of the population and the multi-ethnic make up of its society, several factors exacerbate the situation:

- Distances to health service providers are considerable because in regions with low population density the size of coverage area of a Health Center responsible for approximately 10.000 people is much bigger compared to regions with high population density. At the same time infrastructure and availability of means of public transportation is in areas with high population density much more developed. Compared to Cambodian lowland the access for public health care staff to their clientele and for patients to their treatment providers is much more difficult in Ratanakiri.



HC covering an area with high population density

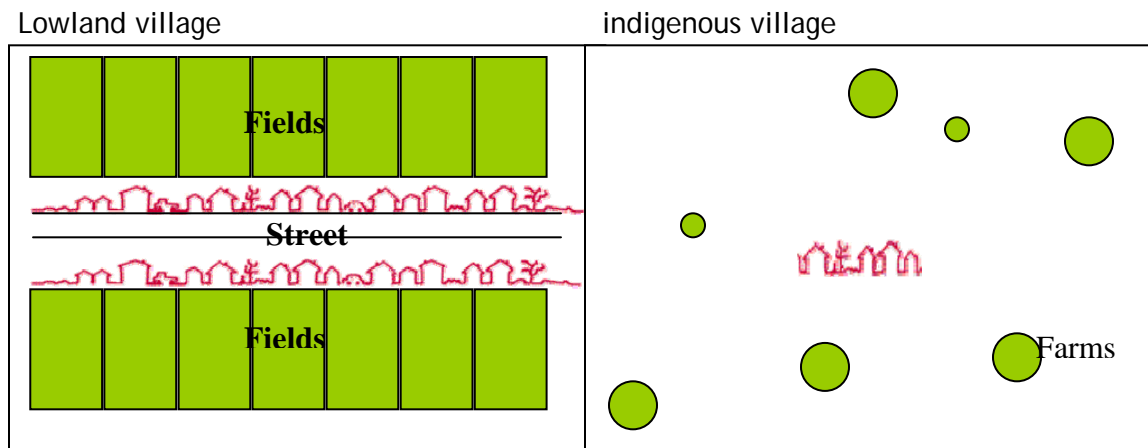


HC covering an area with low population density

- There is a general lack of awareness about the seriousness of TB as well as misconceptions among the population with respect to its transmission and treatment. In the VOR ORT baseline survey among 299 individuals from different households and five different ethnic groups the average level of knowledge about TB symptoms and treatment was at only 12%. (2004) On the whole, indigenous people seek medical care only at critical stages: when they are unable to carry out their routine

work in the fields. In case of TB this is generally in the later stages of the infection. In addition, it is not only the patient who is affected by the decision to access treatment, but also family members who rely on the productive labour of the patient, as well as the relatives required to stay and nurse them during hospitalization.

- In terms of accessing information, many indigenous people are severely handicapped because they neither speak, nor read or write the national language Khmer, even the majority of Khmer nationals in Ratanakiri is illiterate. Therefore, the majority of the population is not aware of nationwide anti-disease programs, and subsequently do not have the opportunity to participate.
This inevitably prevents many indigenous people from accessing health care.
- Low incomes from subsistence agriculture mean that staying hospitalized for two months in a TB treatment center is devastating unaffordable for many people. Without additional food supply (currently through VOR ORT and in future planned through nutrition gardening in the Health Centers) the food supply would be inadequate because home villages that could provide access to supplementary food are too far away. The government allowances of 1000 Riel per person per day are paid irregularly and are insufficient.
- The implementation of community DOTS meets difficulties with regards to the farming system. The indigenous population is practicing rotational shifting agriculture. The locations of fields for farming change over the years, and are scattered around the villages. Throughout the year most people spend more time working and living on their farms away from the village than in their houses located in the village. The distances from the village to the farms can vary from a few hundred meters to many kilometres. The farms are reached by foot over simple dirt paths.
Only in few dry season months after the harvest that finishes in November the village becomes the common place of living, meeting and celebrating until it is time to prepare the fields for the next planting before the beginning of rainy season in March.
In Cambodian lowland -as comparison- peasants usually leave their village homes for the fields in the morning and return in the evening to spend the night in their village.
Implementing community DOTS in a society practicing agriculture like the indigenous people in Ratanakiri means that in worse cases the farm of a TB patient and the farm of the DOTS watcher can be kilometres away from each other. This creates a great burden of traveling and consumption of time on the voluntary working DOTS watcher to guarantee the daily observed intake of drugs over a period of six months.



Summarizing these findings, VOR ORT understands that there is an urgent need for an intensive program to support the NTP to diminish the impact of TB on the poor communities of Ratanakiri.

II.7 Activities up to date:

With the **Tuberculosis Therapy and Awareness Raising Project** VOR ORT has started to tackle these obstacles through the implementation of different activities related to the following objectives:

- To increase capacity of government staff in charge of TB diagnosis and treatment.
 - Employees responsible for TB case finding and treatment from all Health Centers and the referral hospital have received training in two training courses with trainers from the National Center for Tuberculosis and Leprosy Control (CENAT) implemented in September 2004 and September 2005.
 - VOR ORT in addition has implemented two workshops for the same staff to intensify their knowledge in March and June 2005.
 - Four laboratory technicians from the four TB units of the province have taken part in two weeks trainings at the laboratory of the CENAT in Phnom Penh.

- Employees responsible for TB from all Health Posts have participated in the September 2005 training course with a trainer from the CENAT

● To ensure that all people have access to TB treatment and complete the course.

- Since the full implementation of activities in December 2004 all patients hospitalized in the four TB units of the province receive support in form of fresh food products and utensils covering their daily needs, and transportation money for the traveling to get medicines in continuation phase.
- In addition all patients hospitalized are thoroughly educated about TB following a standardized training curriculum which is taught to the patients in their respective indigenous language to increase their understanding and compliance to the treatment.

Patient education sessions are performed at least four times a month in every TB unit of the province (Ban Lung, Voen Say, Borkeo and Lumphat), each session for a period of two days. In the first nine months of 2005 VOR ORT carried out a total of 161 patient education sessions in the four TB units.

Location and activity	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Total
Patient education in the Referral Hospital	5	5	4	2	3	5	4	4	1	33
Patient education in in the HC Lumphat	7	6	5	4	4	4	4	4	4	42
Patient education in HC Voen Say	7	6	5	4	4	5	4	4	4	43
Patient education in HC Bokeo	7	6	5	4	4	5	4	4	4	43
Total	26	23	19	14	15	19	16	16	13	161

● To raise awareness about TB among the indigenous communities of Ratanakiri.

- Patients are trained and motivated during hospitalization to do peer- education in their communities when they return back to their villages after the two month of initial treatment. In education sessions patients are motivated to draw individual IEC materials according education contents and each patient is equipped with a set of IEC materials that can be used by the patient for their peer- education activities.
- The project has developed pictographic and audio/ video IEC materials. The pictures are designed following the education contents and drawn by an indigenous artist to ensure cultural appropriateness.

- An audio spot in four different languages has been produced to be played prior to village awareness raising performances to inform villagers about the performance and to give basic information about TB.
- A video has been produced -in four languages- that tells the story of a TB patient from his sickness through diagnosis treatment and cure. The spot is shown at village awareness raising performances and copies are distributed.
- Each of the DOTS units has been equipped with a pin board showing TB activities and information about TB as ways of infection, signs and symptoms, therapy and support to patients.
- Awareness raising performances have been performed in villages of most indigenous groups of the province and five schools. The performances have been implemented in the respective languages of the target group.


January to September		
Ethnic group	Number of villages	Participants
Tampuen	20	1564
Jarai	17	995
Krung	16	1430
Lao	3	136
Kavet	2	70
Brau	2	241
Khmer	1	225
Schools	5	749
Total		5410

● The activities 2004-2005 were funded by:


- **CIDA** (Canadian International Development Agency)
- **GFATM** (Global Fund to Fight AIDS/HIV, Tuberculosis and Malaria)
- **PMK** (Päpstliches Missionswerk der Kinder)
- **German Embassy** Phnom Penh
- **VOR ORT** e.V.

III Project summary of STOP-TB (2006-2008)

The project is divided into three phases with the main goal to support the NTP in establishing functioning community DOTS and to complete the specific objectives of the Tuberculosis Therapy and Awareness Raising Project concerning capacity building for government staff and making awareness raising and patient education self maintained.

 Goal:

To reduce morbidity and mortality caused by TB in Ratanakiri Province.

 Purpose:

To improve the quality and accessibility of TB diagnosis and treatment, increase case detection and ensure treatment success.

 Specific objectives:

- To increase capacity of government staff in charge of TB diagnosis and treatment

The project will continue to implement training for government staff from all Health Centers, Health Posts and the Ban Lung OD Referral Hospital as well as for laboratory technicians. (See log frame and timeframe)

- To ensure access to TB treatment and compliance of patients.

The project will continue the patient support provided to hospitalized patients in four TB units until the establishment of nutrition gardens makes support with fresh vegetables sustainable and the decentralization of DOTS to community level will make it unnecessary for most patients to become hospitalized.

Patients will be trained in income generating skills like handicraft production.

About 200 patient education sessions will be held in the four TB units of the province. In case patients default from treatment follow up visits will be implemented in cooperation with the local counterpart.

- To increase awareness about TB among the indigenous communities of Ratanakiri

The project will continue to implement awareness raising performances in villages throughout the province. Per year

approximately 100 villages will be visited. Performances are held in the language of the respective indigenous group and in cooperation with a local health care provider. VOR ORT will also implement education about TB in about 20 schools in Ratanakiri. In each school 8 classes will be taught.

In addition the project focuses on training patients during hospitalization to do peer education about TB in their communities in order to make awareness raising sustainable. Former patients will participate in VOR ORT performances to practice their peer education skill and to underline the message as a successfully treated person.

Awareness raising media as pictures, audios and videos will be produced and distributed.

- To establish functioning community DOTS

The project aims to train patients during hospitalization, who show capacity and motivation to get involved in voluntary anti-TB activities to be DOTS watchers in their communities in cooperation with the respective health facility (Health Post or Health Center).

VOR ORT will first pilot community DOTS in three selected communes and then expand to three districts before having a full coverage of the province with community DOTS.

A linkage between health facilities and the voluntary DOTS watchers will be established to guarantee monitoring and supervision.

III.1 Target group

Main target group:

According to the World Health Organization (WHO) approximately 64% of Cambodia's population is infected with Mycobacterium Tuberculosis. Following a HU survey from November 2001 the number of people showing TB suspicious symptoms in indigenous target villages is tremendously high. The project targets to reach those people who develop the disease -especially those who cannot afford the treatment, like marginalized indigenous people or poor Khmer- and to make diagnosis and treatment accessible for them.

 **Beneficiaries:**

Main groups directly benefiting from activities implemented:

- **Six laboratory technicians one medical doctor and twenty-five nurses linked to the NTP**


Medical staff members in charge of TB in the referral hospital, all district health centers and health posts, will benefit directly through building their capacity to perform their duties more professionally, confident and satisfied. In addition the project will improve their work environment through upgrading TB-treatment center facilities.

- **Approximately 300 patients admitted**

All people starting hospitalized TB treatment are going to find liveable conditions under treatment, and receive meaningful information about their treatment and important aspects to improve their and their communities' well-being


- **Population of 200 villages**

Community people approached in approximately 200 village level awareness raising performances.

 **Indirect beneficiaries:**

- **279 villages, 50 communes, 9 districts, 11 different ethnic groups, app. 110.000 people**

The population of Ratanakiri will benefit from the project through an increase of health seeking behaviour among the mostly indigenous people of Ratanakiri as result of better TB services provided by trained staff and better understanding about TB among community people by means of awareness raising conducted. Community DOTS will solve the problems arising from the situation as described above.

 **The Royal Government of Cambodia, the Ministry of Health, the national TB program and the Provincial Health Department**

The Royal Government of Cambodia, the Ministry of Health, the Provincial Health Department and the national TB program will benefit through the support in sufficiently implementing the NTP strategy plan for TB control in Ratanakiri province.


III.2 Sustainability

The project will be implemented in partnership with the PHD and the NTP, which, being a government body will exist beyond the life of the project with increased capacity.

VOR ORT will provide training and supervision to PHD officials, referral hospital, health center and health post staff, needed to achieve good results. Project interventions will lead to improvement in quality of and better access to TB treatment. This will in turn lead to increased public confidence in health services.

Awareness raising materials in the indigenous languages developed during the project period can be used for ongoing health promotion by government institutions and NGO/IOs.


The project aims to build up a pool of DOTS watchers from former TB patients, to support activities like awareness raising and case finding as well as to maintain patient counselling and community based treatment in assistance to the professional health staff.


 Continuation of project activities:


VOR ORT is committed to continuing work in Ratanakiri province to promote and improve public and curative health care. VOR ORT's future activities will focus on HIV/AIDS and general support for the Banlung OD Referral Hospital.


In the Ratanakiri there is an urgent need to improve quality of treatment through technical assistance and to implement a solution for poor people, so that they have the possibility to equal access to curative medical services. Thus VOR ORT's aim is to remain as a localized NGO that is managed by Cambodian nationals from all ethnic groups.


III.3 Linkages to the policies, programs and orientation of the Ministry of Health


-  On the eights of August 2001 VOR ORT received an invitation from the Provincial Health Department (PHD) of Ratanakiri, stating that the organization was welcome to start activities in any area of the health services that are provided by the Ratanakiri Referral Hospital.


-  VOR ORT established a partnership with the National Center for Tuberculosis and Leprosy Control (CENAT) in Phnom Penh to support the National Tuberculosis Program (NTP) in Ratanakiri.

-  The project was included in the Cambodian country proposal to the GFATM in September 2002 (The Global Fund to fight AIDS, Tuberculosis and Malaria).

-  VOR ORT signed a Memorandum of Understanding with the Ministry of Health on November, 30th 2004.

-  VOR ORT signed a Memorandum of Understanding with CENAT on July, 27th 2004.

-  VOR ORT received support from the GFATM for implementation of project activities in 2004 and 2005.

-  In 2005 VOR ORT designed in close cooperation with all key stake holders the **STOP-TB project** to continue its good cooperation with CENAT and the PHD and to establish functioning community DOTS as last dissemination of DOTS services.

IV Attachments:

- A. Log Frame
- B. Time Frame
- C. Budget

Thank you very much for your interest,

Sincerely yours,

Jörg Bunzel

Executive Manager

VOR ORT e.V.