

## INTRODUCTION

This document lays out the MPHP's (Ministry of Public Health and Population) strategic plan for the neglected tropical disease (NTD) program. It is a description of the planned activities for the NPELF (National Program for the Elimination of Lymphatic Filariasis) and the deworming program over a period of five (5) years, running from the year 2011 to the year 2016. Not only are the program's strategic axes clearly defined within the action plan, but this is also a document which can be used as a tool to raise additional financial resources for the program which, as described within this document, is in a critical situation, as it is approaching the termination of its main financing source.

## I - CONTEXTUAL OVERVIEW

Neglected Tropical Diseases constitute a major public health problem. There are seven (7) of them:

- Schistosomiasis
- Onchocerciasis
- Trachoma
- Lymphatic Filariasis (LF)
- Infections caused by *Ascaris* (round worm)
- Infections caused by *Trichuris* (whip worm)
- Infections caused by *Ankylostomiasis* (hook worm)

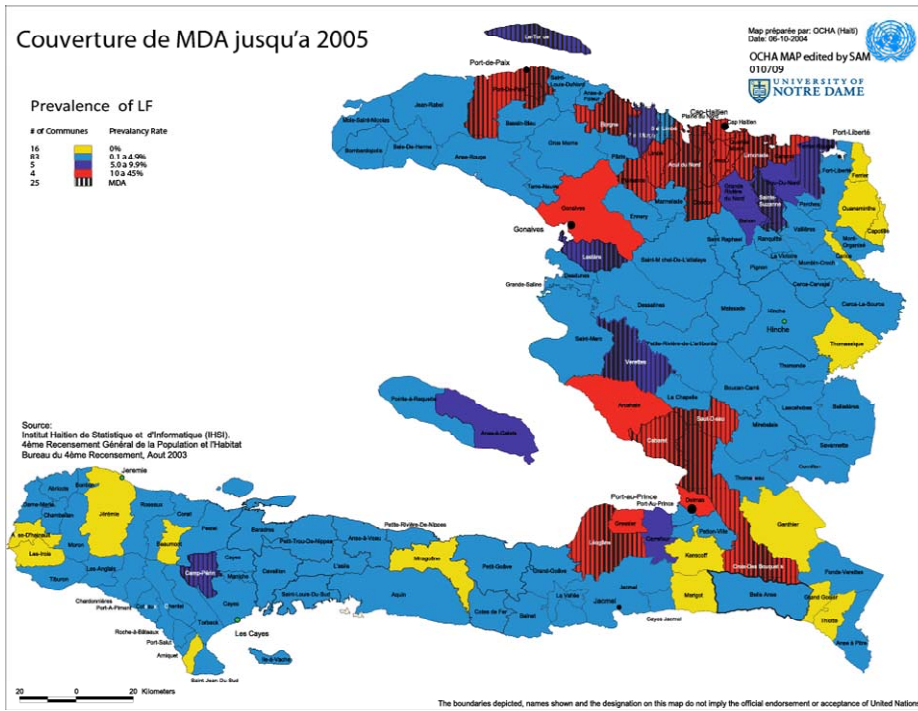
In Haiti, four (4) of these diseases are present: lymphatic filariasis, transmitted by the *Culex quinquefasciatus*, for which the responsible germ is the *Wuchereria bancrofti* and the geohelminths, transmitted oro-fecally and cutaneously (*Ascaris*, *Trichuris*, and *Ankylostomes*). Mapping of the entire country in 2000 by the Ministry of Public Health and Population (MPHP) and some of its partners revealed that 117 of the country's 133 municipalities, or 87.3 %, are infected with lymphatic filariasis; an investigation in 2002 by the MPHP and other partners revealed that all the country's municipalities are infected by geohelminths. One third of the children tested had worms - *Ascaris* was the parasite most frequently found. The prevalence of those infected with LF ranged from 0.1 to 45 %; that of geohelminths from 20 to 74 %. The department of Grande Anse had the lowest incidence of filariasis while having the greatest incidence of geohelminths.

The intestinal parasitosis program focused mainly on children in school. In 2003, in conjunction with the Ministry of National Education and Professional Training (MNEPT) and its partners, the MPHP was able to initiate several treatment campaigns in the departments of the North, the Northeast, Grande Anse, the South and the West, thanks to post-conflict financing from the World Bank. Its goals were to treat, by 2010, approximately 75 % of school-aged children who were at risk for geohelminths. It should be pointed out that these funds, much as those of the Gates Foundation, were stopped in 2005 when the country regained its political stability.

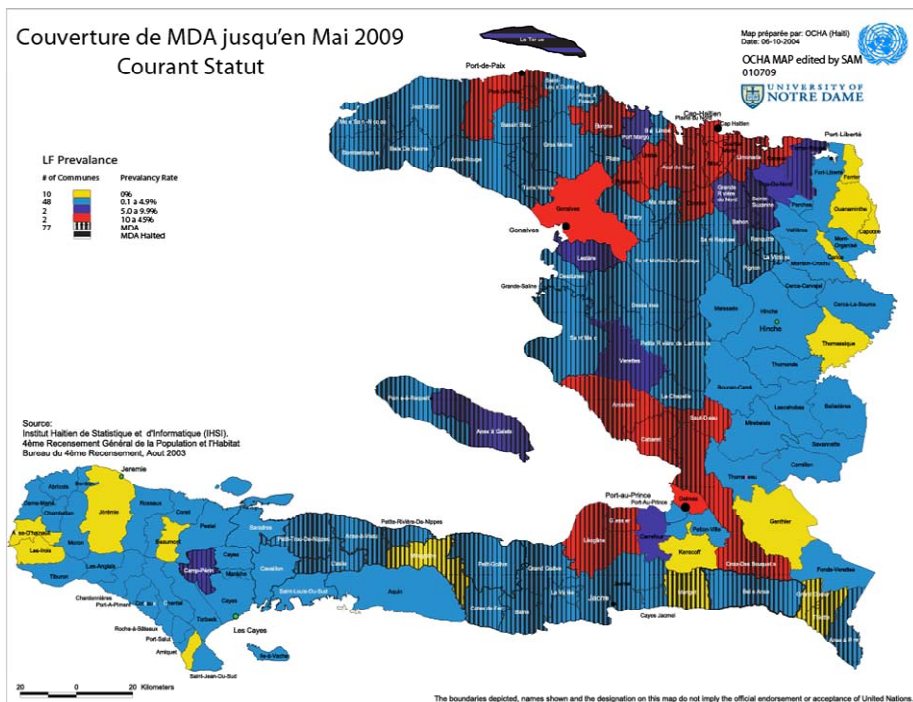
Within the scope of the mass treatment, the LF and deworming programs use the same medication: Albendazole (400 mg), which is distributed free of charge to the recipients. The distribution of Albendazole for the deworming program was done twice a year while the LF program campaigns took place yearly and was given in conjunction with Diethylcarbamazine Citrate.

Thanks to financing from the Gates Foundation through the University of Notre Dame du Lac (UND), and the Centers for Disease Control and Prevention (CDC), the lymphatic filariasis eradication program began its first mass distribution of medication in the municipality of Léogâne in 2000. After this distribution, a considerable decrease of microfilaremia was noted in this community. The Léogâne experiment was quickly replicated in other communities throughout the country. Thanks to financing from the Gates Foundation/University of Notre Dame, 24 municipalities followed Léogâne's example up to 2005: 11 in 2003, 10 in 2004, 3 in 2005, split up in the following manner: 1 in the department of the Center, 1 in the department of the South, 12 in the department of the North, 2 in the department of Artibonite, 2 in the department of the West, 3 in the department of the Northeast and 3 in the department of the Northwest. The Ile de la Tortue (Turtle Island), department of the Northwest, due to, amongst other things, its geographical position, was used as the target to evaluate the treatment's impact on the population. After two consecutive distributions, a considerable decrease of the antigenemia level was recorded. It was thus decided to discontinue the MDAs on Turtle Island.

Because of the depletion of funds and political unrest, the distribution activity came to a halt in 2005. In 2007, the UND funds were renewed and other financing sources, including USAID for the integration of the filariasis and deworming programs, were allocated to IMA World Health. To repeat what was said by Dr. Patrick Lammie, of the CDC, this halt [in activity] resulted in a 3 year back-up, taking into consideration the data collected in the research done in the community of Léogâne after this period. Thanks to these new funds, a great advance was made toward national coverage, which has proven to be essential for the elimination of lymphatic filariasis in Haiti. As of May 31, 2009, we have progressed from coverage of 25 to 77 communities with 28 new ones in 2008 and 25 during the first six months of 2009 (See map 2). The following maps retrace the filariasis antigenemia level in the entire country in 2000 and illustrate the coverage of the filariasis program from 2000 to 2005. It should be noted that in addition to these communities covered by the filariasis program, the deworming program was able to cover the school-going children in 12 other communities. There were 3 in Grand Anse, 5 in the South and 4 in the Northeast (See map 1).



MDA coverage up to 2005



MDA coverage up to May 2009  
Current Status

## II - STRATEGIC AXES

In order to attain its goals, the PNEFL has listed strategies, which have been grouped in 6 categories:

### 2.1 - Strategy 1: Mass treatment

**Mass treatment** provides the means to cut the chain of transmission in the targeted populations, and thus prevent new filariasis infestations. As the disease was chain transmitted, a break in the transmission in a given community, with coverage of 80 % of the population over a period of 5 years or 2 years, depending on the selected treatment, will free the zone of all transmission and will contribute to the worldwide trend of the elimination of LF by 2020. There are 2 treatment strategies: the DEC-Albendazole combination and iodine fortified salts used in conjunction with DEC. Albendazole (one of the medications used in the mass treatment campaigns) is acknowledged to have the ability to expulse intestinal parasites; moreover, when it is administered on a large scale, it has a preventive action on intestinal infections at the community level.



For the mass treatment using pills (DEC-Albendazole combination), it is necessary to train a number of community participants in distribution (distributors), and the number of distributors will be set based on the distribution stations selected, with the help of community leaders, to cover the community, with 3 distributors per station.

With respect to the fortified salt, it is necessary to have contacts and agreements with salt producers and sellers for the supply, distribution and sale of fortified salt. A team will be set up which will be in charge of the fortification, distribution and management of the fortified salt.

The choice of the treatment strategy will be made on the basis of the characteristics of the communities to be treated, with a preference for the fortified salt strategy in heavily populated areas and where the antigenemia level is elevated, and also on the basis of the program's financial possibilities, as the cost of the salt is less than that of pills. The treatment time recommended by the WHO to attain eliminations, with a coverage of 80 % of the population in the zones in which action was taken is 5 years when the selected treatment strategy is the DEC-Albendazole combination. With fortified salt, a period of 1-2 years is recommended to order to achieve elimination; however, it is not yet clear whether

This reduced treatment time will be enough to interrupt the filarial transmission in those zones where the transmission is very high. Each of the distribution strategies has its own preparation period; shorter for the pill-based distribution and longer for the distribution of fortified salt.

With respect to mass treatment, the coverage goals have successively increased since 2002 and currently amount to 9,500,000 people for the 2011-2016 period. 80% of these 9,500,000 people should have received the antifilarial treatment during this period.

## **2.2 - Strategy 2: Handling morbidity**

**The handling of morbidity** by will ease the suffering of those people presenting with clinical manifestations of LF. Adequate attention will be paid to people requiring care at the clinics; this will also lead to the eradication of LF in the country, even after the cessation of preventive activities leading to the interruption of the filarial transmission and its elimination - three new clinics will handle the LF lymphedema.



For this component, two new clinics to handle lymphedema would have to be opened, (the Sacré Coeur Hospital in Milot has suspended its activity in this domain) and initiate a hydrocele surgery program in two other hospitals (in addition to the Cardinal Leger Hospital and the Sainte Croix Hospital in Léogâne, the only institutions where urogenital symptoms are handled). The handling protocols must be validated by the CTNEFL before being disseminated to and applied in the various clinics.

The new handling methods for lymphedema and the new techniques for hydrocele resection will be introduced in the university hospitals, so that the care given to persons presenting with lymphedema, elephantiasis and urogenital symptoms will be given systematically in all the country's targeted health centers and hospitals in order to allow the handling of the clinical manifestations of lymphatic filariasis.

Training sessions for trainers will be held for the providers in order to ensure that care is provided at all levels of the health care system.

### **2.3 - Strategy 3: The sensitization / social mobilization and community participation**

**Social mobilization**, through which the population will be informed and made aware of the problem and the deworming and LF programs. This will allow the targeted population to become members during medication distribution campaigns and to go to the appropriate clinics to receive the necessary care.

The inhabitants of all the communities in which the PNEFL and intestinal parasitosis preventive activities will take place must be made aware of the problems of lymphatic filariasis and intestinal parasitosis, and of the programs dealing with LF and deworming. Community leaders will receive training on LF, and health promoters will be trained to convey key messages about the disease and the PNEFL. Folders, posters, photo albums, video cassettes, audio cassettes, banners, etc. will be produced and distributed in these communities. Posters and folders will also be distributed in all the country's communities. Lectures will be given to inform the medical community, and interviews and sketches shown on television to raise the population's awareness in the major cities, in particular that of Port-au-Prince.

### **2.4 - Strategy 4: Institutional reinforcement and training**

The training of the personnel involved in the program's activities is also a major strategic element. Training is necessary for all those who are going to participate in the program's activities, whether it is doctors and nurses involved in the handling of filarial morbidity, community leaders and health care promoters who are going to work in an effort to mobilize the inhabitants of their communities, or distributors of medications selected at the community level.

### **2.5- Strategy 5: Funds mobilization**

The main supplier of the program's funds is the Bill and Melinda Gates Foundation, which allocated funds for the elimination of lymphatic filariasis in Haiti at the end of 1999. These funds, covering a period of 5 years, ended at the beginning of 2005, 3 years after the beginning of the country-wide activity of the fight against lymphatic filariasis, and right in the middle of the race toward the elimination of the disease. The financing was renewed, sadly enough, only in 2006; this brought about an interruption of the program's activities and gave rise to an increase of microfilaremia to the levels it had reached two years earlier. It is thus essential to mobilize additional resources in advance, which will allow not only the completion of the mass treatment campaign, but also the attainment of goals with respect to the elimination of LF by the year 2020.

The two institutions (IMAWH & UND) involved in the fight against lymphatic filariasis and intestinal worms with the Ministry of Public Health and Population (MSPP) will lose their financing in 2011, after a financing period of 4 consecutive years. However, there is still

much to be done in order to reach the goal of the elimination of LF, and the financial resources are hard to find.

In the summer of 2008, the Centers for Disease Control and Prevention (CDC) estimated the cost of the efforts to eliminate lymphatic filariasis at approximately 30 million U.S. dollars, which constitutes an increase over the initial amount in 1999, which amounted to 20 million dollars. In addition to this new financial estimate, recent evidence has shown the risk which the program may incur if these efforts are not maintained. Only concerted action on the partners' part may lead to the elimination of lymphatic filariasis and geohelminths in Haiti.

## **2.6 - Strategy 6: Monitoring and evaluation**

Within the scope of the monitoring and evaluation of the two programs (FL and deworming), at least one sentinel site for each department will be chosen, in addition to the 4 normal Léogâne sites. In these sentinel sites, approximately 500 people will be tested annually after the MDA, using the protocol of the World Health Organization (WHO). This activity will be carried out under the supervision of the Sainte Croix Hospital, with the technical assistance of the other partners, particularly the Centers for Disease Control and Prevention and the oversight by the MSPP's department of epidemiology. The results will be shared with all the partners and will be discussed during meetings between the partners, allowing long-term decisions to be made.

An investigation (KAP and coverage) will be done at the request of the MSPP or the other partners in certain communities where the coverage is greater than or equal to 95%. The CDC will supply technical assistance for these investigations.

The University of Notre Dame, in conjunction with the CDC, will continue to conduct research in order to quantify the program's impact on the program's indicators. Several aspects of the program will be researched:

- Knowledge, attitudes, practices
- Coverage rates
- Antigenemia rate
- Use of mosquito nets
- Visits to lymphedema clinics
- Use of fortified salt
- Program membership

### III – PROGRAM’S GOALS FOR EACH STRATEGY

#### 3.1 Overall goal

The program’s overall goal is to eliminate lymphatic filariasis in the entire country by 2020, by promoting the population’s access to various treatment methods.

#### 3.2 Specific goals

The specific goals involve a five year period (2011-2016) and are set for each strategy.

##### Strategy 1: Mass treatment

-Treat 7,600,000 people of the 9,500,000 people (excluding pregnant women and children of less than two years of age) against lymphatic filariasis.

In order to rationally use human and financial resources, IMA World Health and UND have made the following proposition for the period ending in December 2011. Excluding the 20 communities of the Departments of Nippes and the Southeast, the departments of the North, the Northwest, the Northeast, the South, the Grand Anse and the Artibonite, excluding the Gonaïves, will be covered by the IMA World Health, thanks to the USAID’s financing, under the supervision and with the support of the MSPP. The UND will supply the financial resources to the MSPP, HSC and Partners in Health (PiH) for the departments of the West and Center, as well as the community of Gonaïves, under the supervision and with the support of the MSPP.

Up until June 2010, thanks to the financial support of USAID and UND, the country will have the following coverage:

Department	Number of Communities	Recipients
North	19	IMA World Health
Northwest	9	IMA World Health
Artibonite	14	IMA World Health and HSC
Northeast	13	IMA World Health
South	19	IMA World Health
Nippes	10	IMA World Health
Southwest	10	IMA World Health
West	14	HSC and MSPP

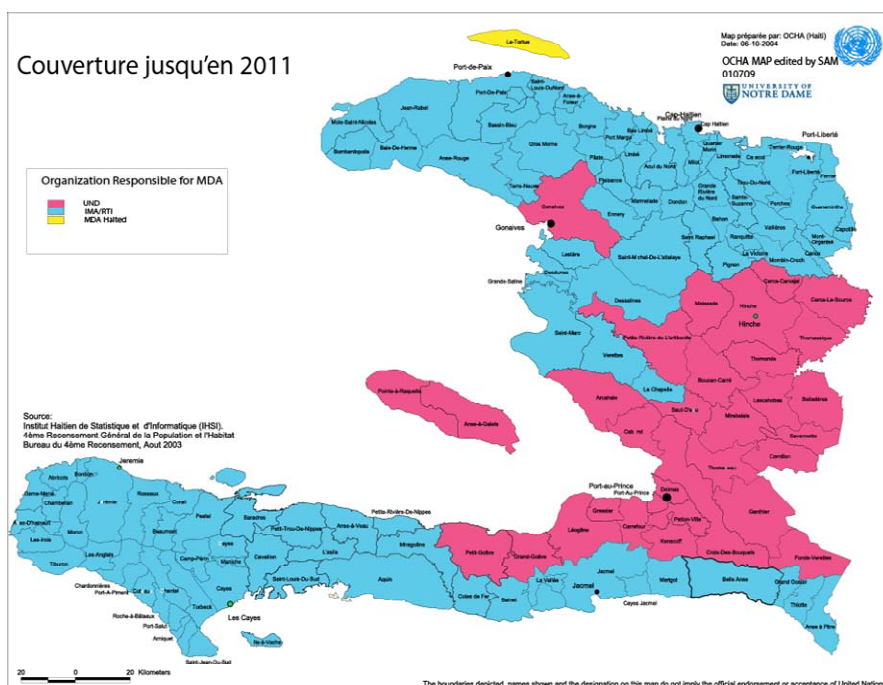


From July 2010 to December 2011, thanks to the same sponsors, the departments of the Grande Anse, the Center and the Metropolitan Zone will be covered (See table).

Department	Number of Communities	Recipients
North	19	IMA World Health
Northwest	9	IMA World Health
Artibonite	14	IMA World Health et UND
Northeast	13	IMA World Health
South	19	IMA World Health
Nippes	10	IMA World Health
Southeast	10	IMA World Health
Grande Anse	12	IMA World Health
Center	12	UND
West	20	UND

The map below summarizes the realignment plan for national coverage up to December 2011.

[Coverage up to 2011]



### **Strategy 2: The handling of morbidity**

- Open three (3) clinics to handle filarial lymphedema.
- Teach and introduce the new techniques for handling lymphedema in medical universities and university hospitals.
- Teach the surgeons and urologists the new techniques for handling lymphedema and the resection of hydrocelesols.
- Train 80% of the department's providers in the handling of lymphedema.
- Implement the surgery program for hydrocelesols in two other institutions.

### **Strategy 3: Awareness / social mobilization and community participation**

- Inform and raise the awareness of the population of 100% of the communities targeted by the mass treatment activity.
- Develop additional communication material and distribute this preventive material in 100% of the country's communities.
- Use new strategies for the purpose of sensitizing the urban population of the metropolitan area (documentaries, sketches, interviews in the media, etc...).

### **Strategy 4: Financial mobilization**

Identify and obtain additional resources for the continuation of the PNEFL activities and the deworming program 2016, before the end of 2010.

### **Strategy 5: Monitoring and evaluation**

Monitor the program's indicators in each of the 10 departments and quantify the impact of the program's activities.

## **IV – DESIRED RESULTS**

The desired results are expressed by strategies.

### **Strategy 1: Mass treatment**

- That 80% of the targeted persons receive their dose of medication.
- That the microfilaremia levels in the communities in which action was taken decrease over the years of treatment, finally attaining a level of less than 1 %.

### **Strategy 2: Handling morbidity**

- That 80% of the patients with lymphedema or elephantiasis received care from the 3 clinics handling lymphedema.
- That ~100% of the first year students in medical sciences have been informed of filarial lymphedema and the new diagnostic techniques and methods, of handling and treating filarial lymphedema.
- That 80% of the persons presenting with a hydrocele in the institutions in which the hydroceles surgery program had been implemented received the necessary care.
- That 80% of the providers had been trained in the handling of lymphedema.

### **Strategy 3: Awareness / social mobilization and community participation**

- That the population of all the communities targeted for mass treatment activities have been made aware of the problem of lymphatic filariasis and the program for the fight against lymphatic filariasis.
- That the population of all the communities targeted for mass treatment activities have requested its treatment dose.
- That the population of all the communities targeted for mass treatment activities have been informed of the means for the preventions of filarial infestation and apply them.

### **Strategy 6: Financial mobilization**

- That additional resources be identified before the end of 2010 for the financing of the program's activities.

### **Strategy 7: Monitoring and evaluation**

- That the impact of the mass treatment on the indicators is quantified and the monitoring of the indicators done using the data collected on the sentinel sites.

## **V - FOLLOW-UP AND EVALUATION**

The PNEFL follow-up and evaluation will be done at various system levels:

### **At the central level**

The CTNEFL will intervene by carrying out an internal evaluation of the process by means of its quarterly meetings at which the progress made in the program is presented, along with the decisions made at the level of the various sub-committees.

The Coordination will request an annual external evaluation by the CDC and will also make on-site oversight and control visits for the various program activities in order to ensure that there is compliance with the standards (both for the mass treatment: annual oversight visit to the Sainte Croix Hospital and quarterly visits to the two other lymphedema clinics, only for the handling of morbidity).

### **At the peripheral level**

The departmental and USC management of the areas targeted for PNEFL activities will also carry out timely supervision and control in the targeted area in order to ensure that the activity is progressing in a satisfactory manner, at the set period and in compliance with the directives of the central level.

From a methodological point of view, particular emphasis should be placed on the evaluation of mass treatment activities. In order to evaluate the program's results, it is necessary to collect baseline data before the start of the mass distribution campaign with respect to the following indicators: microfilaremia, antigenemia and, sometimes, the vector infestation rate. This data will be collected in the region in which the mass treatment is taking place, on a sample of about 500 persons chosen in a selected zone called the "sentinel site", representing the image of the above-mentioned indicators for the region in question. Data on these above-mentioned indicators will be collected after treatment and will provide for the evaluation of the mass treatment.

For the mass treatment activity, the PNEFL has used, until now, registers which are located in the various distribution stations for the recording to the treated persons. At the end of the distribution period, these registers are delivered to the local supervisor who, in his turn, delivers them to the central supervision team for the processing of the data.

In the case that the program's activities in a community are handled by partners (Sainte Croix Hospital in Léogâne, IMA), the latter will supply an annual general report with respect to the mass treatment, and a quarterly one for the handling of the morbidity.

## **VI- NEW / ADDITIONAL STRATEGIES**

In order to eliminate lymphatic filariasis, there are other alternative and/or additional interventions in addition to the distribution of an annual dose of medication. In Haiti, until the present, the mass distribution of medication has been the main strategy used. In the event that this should prove insufficient, other alternatives may be taken into consideration (i.e. biannual distribution of medication, use of doubly fortified salt, use of mosquito nets, etc.):

#### A- Biannual medication distribution

In the event that on-site research reveals that a single distribution of the medication was not sufficient in certain communities in the country, the option of a biannual distribution will be considered. In order to do this, each partner institution will be responsible for organizing a second mass distribution in its respective community.

#### B- Doubly fortified salt

In partnership with the MSPP, the Congrégation Sainte Croix (CSC), and the SPES Group, the University of Notre Dame will continue with the expansion of the fortification program of doubly fortified salt in order to achieve national coverage. For the moment, the efforts are concentrated in the Carrefour zone, with the possibility of expansion toward Port-au-Prince. However, following the report of the investigations which will be done in the country, if it proves necessary to make the salt available to red or needy zones, the UND will try to execute the plan as indicated.

#### Doubly fortified salt distribution plan

The distribution of doubly fortified salt will be done in three phases. The first, which consists of a concentrated distribution in the Carrefour zone, is presently underway. The second phase will cover the distribution of the salt in the communities of Tabarre, Léogâne and the metropolitan area of Port-au-Prince, with an option of making this salt available to the community of Gonaïves. The last phase will make the salt available in areas with high endemicity levels.

#### Financing

In the long term, no financing source has yet been found. The University of Notre Dame is looking for funds which would allow it to attain this goal.

#### C- Water and Draining

In order to eliminate NTDs in Haiti, the control of water quality has proven to be of enormous importance: the intervention of other MSPP entities and the government must be part of this fight against NTDs.

Improving the surroundings and the environment by cleaning the canals and the sewers will be a step toward the elimination of the mosquito larva beds. It is imperative that the work be done in concert with the Ministries of the Environment, Agriculture and the TPTC in order to attain this goal.

The University of Notre Dame would like to work in concert with the Interamerican Development Bank in order to integrate this aspect with respect to Port-au-Prince. Discussions will be initiated soon.

**D- Materials treated with insecticides + vector control**

The University of Notre Dame and IMA World Health would like to work in concert with the malaria program to coordinate the distribution of impregnated mosquito nets in their respective intervention zones. Other approaches such as the household distribution of materials treated with insecticides, the elimination of mosquito larva beds and the spraying in houses may be considered.

**E- Increased social mobilization**

New approaches to social mobilization at the urban and rural levels are an attempt to increase the mass treatment coverage, and the participation rate has been designed and will be tested in the Department of the West between 2010 and 2012.

## **VII-PARTNERS' ROLES**

Each institution must play its part and ensure, under the leadership of the Ministry of Public Health and Population, that its activities are well coordinated.

### **1- Mass distribution of the medication**

#### **a. IMA World Health's role**

The IMAWH will continue the mass distribution of the medication in nearly all the country's departments, with the exception of the Department of the West, Center and the community of Gonaïves, which is located in the department of Artibonite.

Financing

The funds are not yet available; however, approaches have already been made.

#### **b. University of Notre Dame's role**

The University of Notre Dame will continue to finance the distribution of the medication in the Departments of the West and Center, as well as the community of Gonaïves.

Financing

The University of Notre Dame is seeking additional funds in order to be able to continue the mass distribution in the above-mentioned locations.

## VIII - HUMAN RESOURCES REQUIREMENTS

The Coordination of the MSPP's Filariasis and Malaria program would like to obtain advanced training in entomology and epidemiology for two national managers. This noble idea is shared by the UND and the IMA. They intend to have the case brought before the sponsors so that this can be done during the project's execution phase (2010-2016).

## IX - CHRONOGRAM

### 5 year coverage plan chronogram

#### Year 1 Year 2 Year 3 Year 4 Year 5

	Year 1	Year 2	Year 3	Year 4	Year 5
<b>MDA component</b>	- Coverage of 138 communities - IMA in charge of MDA in 8 depts. (106 communities) - UND in charge of MDA in 2 depts (32 communities)	- Coverage of 138 communities - IMA in charge of MDA in 8 depts ( 106 communities ) - UND in charge of MDA in 2 depts ( 32 communities )	- Coverage of 138 communities - IMA in charge of MDA in 8 depts ( 106 communities ) - UND in charge of MDA in 2 depts ( 32 communities )	- Coverage of 138 communities - IMA in charge of MDA in 8 depts ( 106 communities ) - UND in charge of MDA in 2 depts ( 32 communities )	- Coverage of 138 communities - IMA in charge of MDA in 8 depts ( 106 communities ) - UND in charge of MDA in 2 depts ( 32 communities )
<b>Morbidity management component</b>	- Morbidity Protocols validation - Opening of 3 additional clinics for lymphedema - Implementing hydrocele program in 2 more institutions	- Functioning of clinics/ hydrocele repair centers - Training of health care providers for lymphedema management -Training of urologists/surgeons for hydrocele repair	-Functioning of clinics/ hydrocele repair centers -Training of health care providers for lymphedema management -Training of urologists/surgeons for hydrocele repair	- Functioning of clinics/ hydrocele repair centers - Training of health care providers for lymphedema management -Training of urologists/surgeons for hydrocele repair -Integration of LF morbidity management to the medical faculty curriculum	- Functioning of clinics/ hydrocele repair centers - Training of health care providers for lymphedema management -Training of urologists/surgeons for hydrocele repair -Integration of LF morbidity management to the medical faculty curriculum -Integration of morbidity management to the health minimum package
<b>Social mobilization component</b>	Social mobilization campaign preceding	Social mobilization campaign preceding MDA, with emphasis on new	Social mobilization campaign preceding MDA, with	Social mobilization campaign preceding MDA, with emphasis on new mobilization	Social mobilization campaign

	MDA, with emphasis on new mobilization strategies to sensitize PAP population	mobilization strategies to sensitize PAP population	emphasis on new mobilization strategies to sensitize PAP population	strategies to sensitize PAP population	preceding MDA, with emphasis on new mobilization strategies to sensitize PAP population
<b>Monitoring and evaluation</b>	Sentinel sites of Léogâne + one by department	Sentinel sites of Léogâne + one by department	Sentinel sites of Léogâne + one by department	Sentinel sites of Léogâne + one by department	Sentinel sites of Léogâne + one by department
<b>Research</b>	ongoing	ongoing	ongoing	ongoing, with a focus on approaches for sustaining gains against geohelminths	ongoing, with a focus on approaches for sustaining gains against geohelminths
<b>Secondary measures to complement MDA in LF hyper-endemic zones</b>	<p>A-pilot 2 communities (Quartier Morin, Plaine du Nord)</p> <p>B-pilot 2 communities, including Carrefour</p> <p>C-4 sites, including Ste. Marc and Port-de-Paix</p> <p>D-assessment of impact for Global Fund program</p> <p>E-pilot projects in 4 communities, including 2 urban communities</p>	<p>A-2 communities (Quartier Morin, Plaine du Nord); assessment</p> <p>B-4 communities, including Carrefour and Léogâne; assessment</p> <p>C-4 sites, including Ste. Marc and Port-de-Paix; assessment</p> <p>D-possible implementation of focal vector control, ITM supplements to Global Fund project; assessment</p> <p>E-pilot projects in 4 communities, including 2 urban communities; assessment</p>	Implement optimal package of secondary measures, as needed, in a maximum of 40 communities	Implement optimal package of secondary measures, as needed, in a maximum of 40 communities	Implement optimal package of secondary measures, as needed, in a maximum of 40 communities



## X – COST AND FINANCING

### Budget

#### MTN Program Budget

September 10, 2009

	Funding Needed					<u>Total</u>
	<u>2011/2012</u>	<u>2012/2013</u>	<u>2013/2014</u>	<u>2014/2015</u>	<u>2015/2016</u>	
<b>Total Program</b>						
Departments	10	10	10	10	10	
Communities	139	139	139	139	139	
Total Population	11,156,045	11,466,096	11,785,728	12,115,407	12,440,896	
Eligible Population	9,482,639	9,746,182	10,017,869	10,298,096	10,574,761	
Treatment Estimate	10,103,077	10,381,517	10,668,530	10,964,545	11,255,873	
MDA	\$3,559,778	\$3,660,386	\$3,701,666	\$3,807,181	\$3,905,971	<b>\$18,634,982</b>
Morbidity	465,566	488,127	511,233	536,064	561,459	<b>2,562,450</b>
Administration	771,418	797,767	814,364	842,837	859,647	<b>4,086,033</b>
Operational						
Research	154,549	162,277	170,390	178,910	187,856	<b>853,982</b>
Secondary Methods	230,369	472,519	726,528	992,963	1,272,287	<b>3,694,667</b>
M&E	42,041	140,041	42,041	140,041	42,041	<b>406,205</b>
Formation	<u>40,000</u>	<u>40,000</u>	-	-	-	<b><u>80,000</u></b>
<b>Total</b>	<b>\$5,263,722</b>	<b>\$5,761,116</b>	<b>\$5,966,224</b>	<b>\$6,497,996</b>	<b>\$6,829,260</b>	<b>\$30,318,319</b>

#### Footnotes

1) Figures reflect In-Country costs of the program

For more details, contact Dr. Vely Jean-Francois or Mr. Logan Anderson