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Emergency Plan of Action operation update

Seychelles: Dengue outbreak

 International Federation
of Red Cross and Red Crescent Societies

DREF Operation n° MDRSC004	Operation start date: 9 June 2016
Date of issue: 18 August 2016	Expected timeframe: 3 months
Operation manager (responsible for this DREF): Andreas Sandin, Disaster Management Coordinator, East Africa and Indian Ocean Islands Country Cluster Team	Point of contact (name and title): Mrs. Colette Servina,
Overall operation budget: CHF 54,432	
Number of people affected: 1,062 persons	Number of people to be assisted: 66,392 (16,392 direct and 53,000 indirect beneficiaries)
Host National Society presence (n° of volunteers, staff, branches): 3 branches, 500 volunteers, 7 staff	
Red Cross Red Crescent Movement partners actively involved in the operation: French Red-Cross' Regional Platform "PIROI", the International Federation of the Red Cross	
Other partner organizations actively involved in the operation: The Ministry of Health and the Department of Risk and Disaster Management (DRDM)	

This update is seeking a revision in the activities suggested in the original submission to take into account anticipated evolution of the dengue outbreak in Seychelles.

Summary: As of 12 July 2016, the Ministry of Health reported the number of cases as 1,062 with the outbreak extending to all five regions of the country, the 5 most affected districts being English River (101 cases) Anse Royal (99 cases) Anse Etoile (82 cases) Beau Vallon (78 cases) and Point La rue (62 cases). Based on this, the NS is adding another 4 districts which will total to 5 intervention districts.

The new operation objective is therefore to reduce the risk of spread of the dengue virus for 16,392 persons in the five most affected districts of Seychelles and sensitizing approximately 53,000 persons on dengue fever via radio programs. In addition to this, majority of the baseline respondents preferred the use of repellents as opposed to using mosquito nets and their main concern for not buying repellents are the cost and availability of repellents in Seychelles. To this effect, the NS will distribute repellents instead of mosquito nets.

Finally, the duration of stay for RDRT was budgeted for 4 weeks but the required support was eventually only needed for two weeks. The NS proposes that the unspent funds are used to procure and distribute additional repellents and some funds will be used for the endline survey. Although the total budget amount has not changed, there have been some changes in the budget to accommodate the above mentioned changes. (Please see revised budget).

[<click here to view the revised budget or here to link to contact details >](#)

A. Situation analysis

Description of the disaster

According to the Ministry of Health, 253 people have tested positive for dengue between January - 21 May 2016. There has been an exponential increase in the number of confirmed cases from week 16 onwards with the peak (66 people) in week 19.

As of 12 July 2016, the Ministry of Health reported that the number of cases had increased to 1,062 cases and the outbreak extended to all five regions of the country and the most 5 affected districts are English River (101 cases) Anse Royal (99 cases) Anse Etoile (82 cases) Beau Vallon (78 cases) and Point La rue (62 cases). The Northern region being the most affected followed by Central region with the Western region being the least affected.

The Ministry of Health has stipulated that the number of cases seems to be on a decline but there is still the need to fight against the eradication of breeding sites for mosquitoes and continuous sensitization on and protection from the virus.

Table 1 showing figures in the most five affected districts as of 12 July 2016

District	Cases	Population
English River	101	3,987
Anse Royal	99	4,168
Anse Etoile	82	4,117
Beau Vallon	78	4,120
Point La Rue	62	3,071

The above trend is an underestimation of the real situation on the ground which is much worse since, people who have suffered from the milder form of the disease are not seeking medical attention. Two subtypes of dengue (DENV1 and DENV 2) are currently circulating in Seychelles. Several measures have been put in place to combat this outbreak.

Summary of current response

Overview of Host National Society

The Red Cross Society of Seychelles (RCSS) is the only recognised humanitarian organizations responding to humanitarian needs in Seychelles. RCSS has a good network of volunteers and works in coordination with the Ministry of Health and the Department of Risk and Disaster Management (DRDM). Major activities supported through IFRC DREF include survey(assessment), volunteer trainings, sensitization, and campaign.

To support the effort of the Ministry of Health in community awareness and sensitization of the dengue fever, the Red Cross Society Seychelles conducted a workshop for its staff and volunteers supported by an RDRT member from IFRC to enhance their knowledge on the virus to be better equipped to inform the community on vector control and also the Red Cross activities. Following the training, the NS conducted an awareness campaign and distribution of mosquito repellents during national events targeting huge crowds at the events in close collaboration with the Ministry of Health.

The NS continues to attend the coordination meetings organize by the Ministry of Health on a weekly basis. The purpose of the meeting is to inform responders on the evolution of the outbreak and action taken by each partner.

With the support of an IFRC staff, the NS conducted a survey using the ODK in the 4 affected districts to inform the NS on the level of knowledge, attitude and practice of these communities on dengue fever. This information was used to inform further activities. Based on the information from baseline survey report, NS designed its IEC materials and billboard to have adapted and relevant messages.

Overview of Red Cross Red Crescent Movement in country

There is no in-country Movement presence in Seychelles. The National society is still implementing some DRR activities from the support of the IFRC under the Tsunami residual fund. The regional platform (PIROI) has been very supportive to the RCSS especially in emergency situations and on DRR education project. Within the framework of the MoU signed in 2012, PIROI is the Movement focal point of Indian Ocean Islands National Societies for Disaster Risk Management issues, in coordination with the IFRC EAIOI Cluster and the Africa Region.

Overview of non-RCRC actors in country

The Ministry of Health continues to take the lead role in the national response operation and facilitating the coordination meeting with inter-agency on a weekly basis. The Department of Risk and Disaster Management (DRDM) is ensuring the facilitating role for the responders for effective action and they meet on a weekly basis. The RCSS also attend this meeting. (Red Cross, Local Government Military, Police Fire Service, Land Transport, Waste Management),

Needs analysis and scenario planning

Increasingly, people with fever are reporting to medical clinics and this is allowing the Ministry of Health to make early detection if the symptom relate to dengue. As of 12 July 2016, the Ministry of Health had reported 1,062 cases with the outbreak extending to all five regions of the country with the 5 most affected districts being English River (101 cases) Anse Royal (99 cases) Anse Etoile (82 cases) Beau Vallon (78 cases) and Point La rue 62 cases. The Northern region being the most affected followed by Central region with the Western region being the least affected. The Ministry of Health has stipulated that the number of cases seems to be on a decline but there is still the need to increase efforts in the eradication of breeding sites for mosquitoes and continuous sensitization on and protection from the virus. Based on this, the NS is including Point La Rue together with the 4 identified districts which will total to 5 intervention districts.

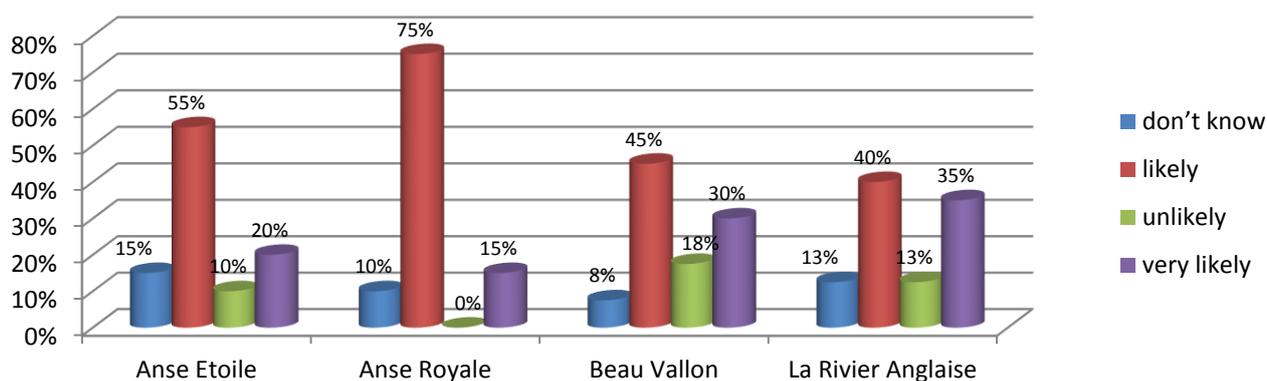
One of the activities planned in the DREF operation, is a baseline and endline survey to inform further action as well as assess the impact of the operation. The findings of the baseline survey (held end of June 2016), showed that although a majority of respondents (98%) had reported hearing of Dengue Fever (DF) in the past, knowledge levels on DF symptoms as well as Aedes mosquito biting times were generally low. Over one-third of respondents stated that the Aedes mosquito bites during the night (38%), while 23% did not know what time the mosquito bites. The baseline survey also revealed poor measures taken by the communities to protect themselves from DF as - only 49% reported clearing of garbage within their compound, 22% regularly changed water from flower pots while less than 10% kept their drains free from blockage or used repellent. Respondents over 50 years and those from Anse Etoile were particularly at risk to DF infection, due to their low risk perceptions and poor attitudes towards DF.

The analysis of the situation and the type of mosquito spreading the virus, makes it evident that the active biting time of the mosquitoes is between early morning and late afternoon. During this period most of the house occupants are at work and children at school. It has therefore been seen that the use of mosquito nets will not be the best appropriate response and their use will not be effective. Through the baseline survey it was noticed that the majority of Seychellois were not familiar with mosquito nets and that traditionally this was not used in Seychelles. During the survey conducted, the majority preferred using repellents but their main concern was the cost and availability of repellents in Seychelles. To this effect, the NS will distribute mosquito repellents instead of mosquito nets.

Risk Analysis

The baseline gave some insights in the perceptions of the communities on the likelihood of catching dengue. The majority of respondents from Anse Royale (90%) perceived it "very likely" and "likely" to catch DF as compared to the other three districts surveyed (75%) as shown below.

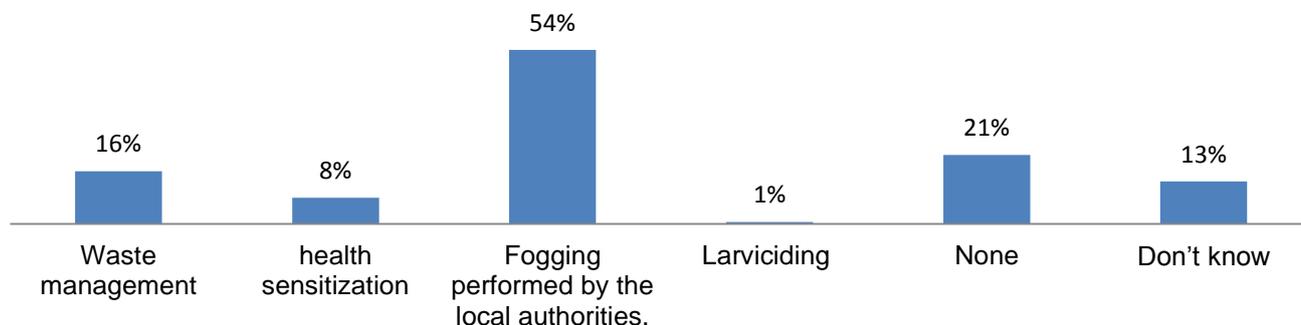
Likelihood of Catching Dengue Fever (N = 160)



The baseline survey revealed that little action was taken by majority of respondents to personally protect themselves from mosquito bites with only 3% and 8% of all respondents reporting wearing long-sleeved clothing and using repellent respectively. Main reasons cited by respondents for not using repellent were: “I do not see the need” (39%), “There are no mosquitoes around” (12%) and “Never heard of repellent” (9%). In regards to recent dengue fever cases, a total of 7 respondents reported that a member from their households had been affected by DF in the past three months (3 DF cases from Anse Etoile, 1 case from Anse Royale and 3 cases from Beau Vallon).

Finally, fifty-four percent of respondents stated that fogging was carried out in the community within the last 6 months. Other DF preventive activities reportedly carried out include waste management (16%) and health sensitization (8%), while one-fifth of the respondents reported that no action was taken in the past 6 months as shown below.

Collective action has been taken to control dengue in the community (N = 160 persons)



B. Operational strategy and plan

Overall Objective

Reducing the risk of spread of the dengue virus for 16,392 persons in the five most affected districts of Seychelles and sensitizing approximately 53,000 persons on dengue fever via radio programs.

Proposed strategy

The Red Cross Society of Seychelles will maintain its strategy by working directly with communities and in coordination with local authorities and the Ministry of Health. Additionally, the Department of Risk and Disaster Management (DRDM) has created a forum to facilitate all first responders in which the RCSS are included. The strategy involved comprehensive work, starting with actions to train Red Cross volunteers and community members on the protection from the virus and its propagation and to perform actions to prevent and eradicate the vector by awareness-raising to vulnerable populations and community-based campaigns. These activities are complementing initial actions performed by the national health authorities in health facilities and structures.

The RCSS has reviewed its priority actions within this Plan of Action based on figures of the 5 most affected districts.

The following actions are being implemented within the Plan of Action's strategic lines:

- Promotion of prevention and sensitization campaign with actions to combat dengue
- Nationwide radio campaign on dengue disease prevention and protection
- Household cleaning and proper waste disposal campaign and eradication of breeding sites
- Distribution of repellents to day-care centres hosting children aged 4 to 5 of the 5 districts (150 per districts). Following an assessment, additional repellents will be distributed to selected households with elders, pregnant women and babies in the 5 districts (100 per districts)
- Surveillance of situation and monitoring of impact of activities (baseline and end-line survey)
- Lesson learnt workshop with the NS staff and volunteers

It will be strategic for the Red Cross Society of Seychelles to work with groups organized and recognized within the community's district emergency brigade so as to ensure sustainability of actions once Red Cross interventions are over.

The NS is attending meetings organized by the ministry of Health so as to share and review progress of the actions and coordination of joint work.

Operational support services

No changes since the launch of the DREF.

Human resources

The duration of stay for RDRT was budgeted for 4 weeks but he only stayed for two weeks.

Logistics and supply chain

No major changes since the launch of the DREF.

Information technologies (IT)

No major changes since the launch of the DREF.

Communications

The NS has been using the local media such as TV, Radio and newspaper during the past month and will have a special issue in its quarterly newsletter.

Security

No major changes since the launch of the DREF.

Planning, monitoring, evaluation, & reporting (PMER)

A baseline survey was conducted at the end of June. ODK was to be used for data collection, however, it was later decided that Kobo be used as this proved to be more user friendly and is also an open source software. The main objectives of the baseline and the endline survey (which is yet to be performed in August 2016) are:

1. To gather information that will be used in the development of IEC materials (base line survey)
2. To inform sensitization activities (base line survey)
3. To gain insights on breeding sites, knowledge, attitudes and practices (KAP) in dengue affected areas (baseline and endline survey)
4. To measure the impact of DREF operation (endline survey)

A total of 160 respondents were randomly selected for the baseline survey, forty respondents from each of the 4 districts. The survey was carried out in Mahé Island in English River, Anse Royale, Anse Etoile and

Beau Vallon. The findings were used to inform IEC materials and secondly to inform Seychelles Red cross sensitization activities.

C. Detailed Operational Plan

Quality Programming / Areas Common to all Sectors

Outcome 1: Continuous assessment, analysis and coordination to inform the design and implementation of the DREF operation	Outputs		% of achievement
		Output 1.1 Emergency Plan of Action is informed by multi-sectorial needs assessment; and coordination with other Ministry of Health/ DRDM	
Activities	Is implementation on time?		
	Yes (x)	No (x)	
Assessment	X		80%
Monitoring/surveillance survey, Kobo training	X		80%
Lessons learnt workshop	X		To be completed
Progress towards outcomes			
Ten staff and volunteers have been trained on how to use Kobo and successfully completed survey in 4 districts. Assessment conducted in 4 districts for beneficiary selection			
<p>Achievements</p> <p>Seychelles Red Cross volunteers and staff were trained in using Kobo (mobile data collection tool), and successfully used it to collect baseline data for the survey. The results are currently being used to inform the sensitization activities as well as IEC materials planned for distribution in the affected communities. Based on the baseline findings and main conclusions the recommendations are as follows:</p> <ol style="list-style-type: none"> RCSS needs to put more emphasis on promoting the less commonly practised dengue fever preventive measures both at prevention workshops and sensitization campaigns: <ol style="list-style-type: none"> Cover all water containers or water storage tanks Change water for flowers or plants at least once a week Disposal of garbage/trash Use of mosquito repellent Wear long sleeve clothes Keep all drains free from blockage Given the low practice and knowledge levels, there is an urgent need for massive awareness programs in affected communities. This should be done through mass sensitization campaigns that utilize popular sources of information: TV, radio and newspapers. RCSS should also sensitize communities on Aedes mosquito biting times as well as DF symptoms, especially those that they are not too familiar with it (skin rash, pain behind eyes, joint-muscle pain, bleeding etc.). RCSS should target most common breeding sites during clean up and sensitization campaigns: garbage, flower pots (emphasize changing of water every week), drains (need to be kept free from blockage), buckets (need to be covered). The IEC materials produced should also include photos of these common breeding sites. Sensitization campaigns should target all affected communities in the 4 districts as well as those at risk, with an emphasis on older people (over 50 years) as well as populations from Anse Etoile as they were revealed to have the lowest risk perception of catching dengue fever with over one-third of its residents not aware of the consequences of mosquito bites, thus putting them at higher risk of infection. Environmental health authorities should (more) regularly visit and sensitize affected communities on DF preventive measures Repellent distributed should be MoH and WHO approved. As the survey showed that a majority of the respondents were not aware of repellents, RCSS volunteers should inform the targeted communities on how to use them, where to find and buy them during their distribution and door-to-door sensitization activities. Communities should be informed that RC volunteers will be carrying out household visits for the end-line survey. 			
<p>Challenges and Changes in strategy</p> <ul style="list-style-type: none"> - There was a slight delay in the implementation of the baseline survey as approval needed to be given by the Ministry of Health in the Seychelles. - It was initially planned to use ODK program. However, it was later changed to Kobo as this proved to be more user friendly and is also an open source software. 			

Health & care			
Outcome 2: The risk of dengue is reduced through information and awareness-raising regarding prevention measures to 16,392 people from 4 districts during three months	Outputs		% of achievement
	Output 2.1: At least 3,278 families have information about prevention and early detection of signs of complications from dengue Output 2.2: 3 schools per district in 4 districts are reached with information on dengue prevention (12 schools) Output 2.3: Mass sensitization campaigns reach more than 50,000 people with information on dengue prevention Output 2.4 50 child minders are reached with information on dengue Output 2.5 1,000 mosquito nets are distributed to selected households and day-care centres with appropriate usage information		40%
Activities	Is implementation on time?		% progress (estimate)
	Yes (x)	No (x)	
Community dengue prevention workshops to volunteers and community members.	x		100%
Door-to-door sensitization	X		On going
Progress towards outcomes			
Achievement:			
Workshop conducted to staff, volunteers and community members whom are equipped with appropriate information to sensitize that community.			
Talks to students on dengue prevention	X		On-going
Workshops to teachers on prevention and early detection of the diseases	X		On-going
Progress towards outcomes			
Achievement:			
Approval has been obtained from the Ministry of Education and talks and workshop are planned for the coming weeks.			

Production of information materials (brochures)	x		On going
Production and broadcasting of radio spots	x		On going
Mass outdoor dissemination campaign (roadside billboards, advertising panels in cities)	x		On going

Progress towards outcomes

Achievement:

Radio spots and production of IEC material are in the final stage. Content of IEC materials are based on the finding of the baseline survey. The NS targeted more than 250 people during a national exposition and conducts sensitization sessions using trained volunteers and staff.

Changes in strategy

Given the explanation of geographical area, the objective is now to reach 5,300 persons with information on dengue.

Conduct workshop for 50 child minders on dengue	x		Completed
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Progress towards outcomes

Achievements

Workshop completed and 60 child minders attended. 10 above target

Distribution of mosquito nets		X	On going
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Progress towards outcomes

Achievement:

Given the insights from the baseline, mosquito nets did not seem to be the most appropriate strategy.

Changes in strategy

Mosquito nets will be replaced by repellents. In total 1,080 repellents will be procured and distributed.

Water, sanitation, and hygiene promotion			
Outcome 3: The risk of dengue has been reduced through implementation of vector control and hygiene practices that prevent mosquito breeding sites in at least 4 districts.	Outputs		% of achievement
		Output 3.1 Three Red Cross branches participate in breeding site elimination and community cleaning	
Activities	Is implementation on time?		% progress (estimate)
	Yes (x)	No (x)	
Procurement of personal protective equipment for 40 volunteers	x		80%
Red Cross branch clean-up and waste disposal	X		On going
Progress towards outcomes			
Achievement:			
Procurement of protective equipment is ongoing. The clean-up and waste disposal is to be conducted as planned.			

D. Budget

See revised budget.

Contact information

For further information specifically related to this operation please contact:

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1. Save lives, protect livelihoods, and strengthen recovery from disaster and crises.
2. Enable healthy and safe living.
3. Promote social inclusion and a culture of nonviolence and peace.

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DREF OPERATION

18/08/2016

MDRSC004 Seychelles - Dengue

Budget Group	DREF grant budget	Expenditure CHF
Shelter - Relief	0	0
Shelter - Transitional	0	0
Construction - Housing	0	0
Construction - Facilities	0	0
Construction - Materials	0	0
Clothing & Textiles	0	0
Food	0	0
Seeds & Plants	0	0
Water, Sanitation & Hygiene	2,360	2,360
Medical & First Aid	5,116	5,116
Teaching Materials	0	0
Utensils & Tools	0	0
Other Supplies & Services	0	0
Emergency Response Units	0	0
Cash Disbursements	0	0
Total RELIEF ITEMS, CONSTRUCTION AND SUPPLIES	7,476	7,476
Land & Buildings	0	0
Vehicles Purchase	0	0
Computer & Telecom Equipment	0	0
Office/Household Furniture & Equipment	0	0
Medical Equipment	0	0
Other Machinery & Equipment	0	0
Total LAND, VEHICLES AND EQUIPMENT	0	0
Storage, Warehousing	0	0
Distribution & Monitoring	0	0
Transport & Vehicle Costs	2,300	2,300
Logistics Services	0	0
Total LOGISTICS, TRANSPORT AND STORAGE	2,300	2,300
International Staff	3,200	3,200
National Staff	0	0
National Society Staff	0	0
Volunteers	5,916	5,916
Total PERSONNEL	9,116	9,116
Consultants	0	0
Professional Fees	0	0
Total CONSULTANTS & PROFESSIONAL FEES	0	0
Workshops & Training	9,268	9,268
Total WORKSHOP & TRAINING	9,268	9,268
Travel	8,700	8,700
Information & Public Relations	11,850	11,850
Office Costs	400	400
Communications	1,000	1,000
Financial Charges	1,000	1,000
Other General Expenses	0	0
Shared Support Services	0	0
Total GENERAL EXPENDITURES	22,950	22,950
Programme and Supplementary Services Recovery	3,322	3,322
Total INDIRECT COSTS	3,322	3,322
TOTAL BUDGET	54,432	54,432