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ANNUAL PROJECT REPORT 2012

United Nations Development Programme, Tajikistan

To eliminate malaria infection through interruption of local malaria transmission January 01, 2012 – December 31, 2012

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Acronyms

FSDFondation Suisse de Déminage or Swiss Foundation for Mine ActionDSADaily Subsistence AllowanceG.AffinisGambusia AffinisGFATMGlobal Fund to fight HIV/AIDS, TB and MalariaICT/Data BaseInformation Communication Technology / Data BaseIRSIndoor Residual SprayingIECInformation Education CommunicationLFALocal Fund AgentLLITNsLong Lasting Insecticide Treated NetsMoH of RTMinistry of Health of Republic of TajikistanM&E SpecialistMonitoring and Evaluation SpecialistNMCPNational Malaria Control ProgrammeNMEPNational Malaria Elimination ProgramPHCPrimary Health CarePIU/UNDPProject Implementation Unit / United Nations Development ProgrammePO Subhi TandurustiPublic Organization Subhi Tandurusti
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PMC Primary Medical Care
RCPD Republican Center of Preventive Disinfection
RCHLS Republican Center for formation of Healthy Lifestyle
RTDC Republican Tropical Disease Center
SRs Subrecipients
TDC Tropical Diseases Centers
UNDAF United Nations Development Assistance Framework
UNDP United Nations Development Programme
WHO World Health Organization

I. Context

The overall goal of the project is to eliminate malaria infection through interruption of local malaria transmission. The malaria elimination project is a reflection on the successful implementation of the Round 5 malaria grant and it is in line with regional malaria elimination strategy of WHO Europe which was endorsed by the governments of the Central Asian states in Tashkent in 2006. The project is aimed at consolidating the achieved results of the ongoing reduction of Malaria infection. The project is scaling up existing efforts of the malaria surveillance system, strengthening National Malaria Control Programme (NMCP) capacity, improving early detection and effective treatment as well as promotion of integrated vector control management. The general population in 41 project districts of the country is targeted by the project.

The main objectives of the project are:

1. Improve capacity within the NMCP to support malaria control policy development, planning, management, partnership and coordination.

2. Strengthen the national surveillance system, including epidemic forecasting, early warning and response.

Improve the coverage and quality of early diagnosis and prompt treatment services in the country
 Promote cost effective integrated vector management based on indoor residual spraying, larvivorous fish, bed-nets and environmental management

5. Provide the evidence required to allow appropriate and effective malaria control strategies responsive to the rapidly changing disease context through a program of needs-based operational research.

6. Expand Behavior Change Communication through the media and community mobilization strategy

The project also contributes to the achievement of one of the UNDAF outcomes stating "Improved access for the vulnerable to quality basic services in health education and social protection". The ultimate goal of the proposed project is to interrupt the transmission of malaria by 2015 following by certification of malaria elimination. In areas where malaria had been eliminated, attention is given to maintaining the malaria-free status. Particular emphasis is also placed on tackling of the growing problem associated with imported malaria. The main implementing partners of UNDP in 2012 were Republican Centre to fight Tropical Diseases (RTDC), Republican Centre for Formation of Healthy Lifestyle (RCFHL), Republican Center of Preventive Disinfection (RCPD) and Public Organization "Subhi Tandurusti". The most vulnerable groups – pregnant women, schoolchildren and general population - were targeted by the project.

The project is expected to bring substantial and noticeable impact to the target population through preventive interventions, which eventually will lead to a rapid decline in incidence of malaria. The interventions of the project are focused on reduction in number of malaria foci rather than malaria cases. The overall multi-sectoral response to malaria elimination will be further strengthened through integration of services and pooling of resources as well as sustaining achievements of the project and keeping the trend of the disease further diminishing.

The impact indicators are the incidence of malaria in the target areas, which reflect the effectiveness of the preventative measures implemented, and enhanced public knowledge about control measures with demonstrated behavior change in the target population, reflecting the acceptability of interventions and their effectiveness. In line with the WHO regional malaria elimination strategy it was planned to eliminate P.falciparum malaria by the end of 2010 and in practice, since 2008 Tajikistan has not registered any local P.falciparum, which can be considered as a met target. In conformity with the same strategy, the project and NMCP plans to eradicate P. vivax malaria by the end 2015.

II. Results summary and implementation review

A. Project Results and Impact Summary

Overall project performance can be considered successful as all the indicators set for the year 2012 were achieved on a high standard level. According to the preliminary data of RTDC, a total of 33 malaria cases were detected and all of them (100%) received appropriate treatment according to National Protocol of treatment of malaria. It was planned to supply 299 health and laboratory facilities with necessary items for diagnosis, treatment and, and implementing quality control procedures. Actually, 310 health and laboratory facilities were supplied with necessary items.

According to the plan for 2012, totally 100 000 blood slides were planned be taken and read. Analysis has showed this indicator was overachieved by taking 214 095 slides (214%). According to the Project Performance Framework and Annual Work plan the indicator on training healthcare staff was 580, and this was also overachieved by totally 686 (118.3%) trained healthcare people.

According to plan, operational and malaria data base is available in all the 41 districts, and provided with necessary equipments; communication means and specialists were hired and trained on data collection and analysis. The indicator of the indoor residual spraying was also overachieved by spraying 83,856 (100%) households out of planned 83,851.

A total of 100,236 bed-nets were distributed to population living in malaria prone areas, while the annual planning for 2012 was 100,000. The national source (RTDC) reported having 22 potential foci registered in 2012, which is 58 less than in 2011.

Last, but not least, one of the important project indicators is increasing the knowledge of population on malaria preventive activities. The project planned to educate 31 500 schoolchildren in 15 project districts located in malaria prone regions, while in fact, 31 950 schoolchildren were educated by school teachers.

Project Results Summary		
Target	Output	
1.1) In total 299 health and laboratory facilities sufficiently supplied with items for disease diagnosis, treatment and prevention, and implementing quality control procedures	In total 310 (103.6%) health and laboratory facilities supplied with necessary items for disease diagnostic, treatment and prevention like antimalarial medicines, IEC materials, laboratory reagents, laboratory equipments and furniture and etc.	
1.2) 100 000 of slides taken and read	214 095 (214%) blood slides were taken and read by the all the TDC laboratories. Out of a total number of the slides, 14971 were read repeatedly in the parasitological laboratory of RTDC. Out of a total number of the read slides, 2 slides/cases of Tropical form of malaria, both of these cases were imported to the country from abroad.	
1.3) 580 health authorities, laboratory staff, entomologists and health staff trained / re-trained in malaria case management, treatment and epidemic control and data collection, processing and analysis;	In total 686 (118.3%) health authorities were trained during the reporting period. Out of them, 82 laboratory technicians were trained through a 15-day seminar on "Laboratory diagnostics of malaria" facilitated by RTDC experts. 381 PHC workers were trained through three trainings on "Epidemiology, clinics, treatment and prevention of malaria". Besides, 40 RTDC specialists have got training on the Vector control in Tajikistan. Refresh training for 20 Lab Specialist was conducted. 17 doctors were trained on "Epidemiology, clinics, treatment and prevention of malaria": three trainings on "Elimination of local malaria»,» Introduction to the practice of the National Program for Malaria Control in the Republic of Tajikistan for the period from 2011 - 2015 years" and Epidemiology of malaria for parasitologists and epidemiologists" were conducted for defense and law enforcement agencies and 78 epidemiologists have got	

	training on effective use of database.	
2) 41 districts, where an epidemiological and operational malaria database existed and their capacities are adequate (a computer-based malaria information and reporting systems);	Currently the data-base is available in 41 (100%) districts. All the districts were provided with necessary equipments; communication means and specialists were hired and trained on data collection and analysis.	
3.1) 100% of people with P. vivax malaria receiving treatment as per national guidelines	RTDC reported a total of 33 cases of malaria detected during this reporting period: 31 cases of P.vivax-31, and 2 cases of P.falcipatum. According to the existing procedures, all cases were investigated and the patients (100%) received necessary treatment, according to National Protocol of malaria treatment.	
4.1) 83,851/100% of houses in the areas at risk of malaria transmission that were sprayed with insecticide;	Two rounds of spraying were conducted from June to September 2012 in 19 high risk malaria prone districts/148 villages of the country for the total of 53,772 households. In addition, a one-tour IRS was conducted in July, and covered 16 districts/98 villages and 30,084 households, in the areas with middle level risk of malaria. In total, 83,856 (100%) households were sprayed with the insecticide.	
4.2) 100,000 LLITNs distributed to people at risk;	A total 100,236 LLITINs have been distributed. A total 100, 000 LLITNs were distributed to the population in malaria prone areas. Out of this amount 46 898 small size, 41 376 middle size, and 11 728 large size. In addition, 236 LLITINs were provided by the project for emergency situations, according to the request of organizations working in borders and in malaria prone areas as well as for refugees: FSD-17 units, Soyuz Sapyorov Tajikistana-7 units, RTDC-212 units. Total – 236 LLITINs. Out of this amount 61 - little size, 40 - middle size and 135 - large size LLITINs.	
4.3) <80 malaria foci identified in the country	According to RTDC's 2012 classification, a total of 22 malaria foci were registered. (In comparison with 2011 there were 39 foci have been registered)	
5) Two operational researches conducted	 3 operational researches were conducted: 1. on insecticide resistance 2. RDT research 3. Identification of malaria prevalence level in B.Gafurov district focus and classification of cases and foci 	
6.2) 31 500 school children in the malaria epidemic regions (15 districts) attending malaria prevention education provided by school teachers and community based organizations	The Republican Center of healthy lifestyle (RCHLS) conducted trainings among teachers of secondary schools. The trained teachers carried out informational and educational activities among 31 959 (101.5%) schoolchildren in 15 pilot districts through lectures, discussions, meetings and disseminating IEC materials.	

B. Implementation Strategy Review

The main goal of the UNDP and Global Fund partnership is to assist the country to gain ownership and leadership in management of the three infectious diseases by involving partners to fight with the three main infections. National Coordination Commitee (NCC) on AIDS, TB and Malaria is a main control body of

all the GFATM projects in Tajikistan. NCC plays the main role in developing grant proposals with further submission, project planning and approving strategy documents, such as Work Plan, training plans and etc., provided by the UNDP and other implementing partners.

The UNDP supported NCC to develop the Request for Continued Funding for Round 8 Phase 2 for period October 2011- September 2013 to ensure sustainability of the results achieved to date as well as measures to eliminate P.vivax malaria in Tajikistan by 2015. Currently, UNDP in close collaboration with NCC and all the partners are successfully implementing antimalarial activities on Phase II of Round 8, which were started in October 2011 and will finish in September 2013.

The GFATM Malaria grant is being implemented jointly with the following partners – MoH of RT, RTDC, RCHLS, RCPD and PO Subhi Tandurusti, where RTDC performs trainings and anti-malarial activities and gambuzi fish distribution, PO Subhi Tandurusti conducts one of the vector control activities, and namely the bed nets distribution, while RCPD as a one of MoH's department was responsible for Indoor Residual Spraying activities in the country. RTDC is the main sub-recipient of malaria grant and responsible for planning, policy development and monitoring and evaluation of the National Malaria Elimination Program (NMEP). RTDC successfully implements all set activities such as monitoring and evaluation, training of health workers, and vector control activity. It is also oversees and implements surveillance and coordination with other government institution and neighboring countries. Republican Center for formation of healthy lifestyle (RCHLS) is responsible for overall information and education component of the project and focuses on increasing awareness of the population mainly through schoolchildren.

UNDP as Principal Recipient of the grants of GFATM is mainly responsible building up and develop the capacity of national counterparts in project implementation. UNDP is responsible for the financial and programmatic management of the Global Fund grant as well as for the procurement of pharmaceuticals, health and non-health products. The GFATM Malaria grant provides support to implementation of the National Malaria Elimination Program in the Republic of Tajikistan.

III. Detailed project activities review

<u>Activity 1:</u> Strengthen the capacity of the NMCP to support malaria control policy development, planning, management, partnership and coordination

Strengthening of the capacity of the key institutions

Capacity building of the logistical base and institutional development of the anti-malaria service is one of the priority areas in the framework of UNDP malaria control project in Tajikistan.

In 2012, UNDP handed over 10 microscopes and furniture to the MoH of RT, within the framework of malaria grant of the Global Fund, for their further transfer to RTDC laboratories on the regional, oblast and districts level.

Since the beginning of 2006 and up to now, UNDP handed over various equipment (32 vehicles, 300 bicycles, office equipment, etc) to the Ministry of Health of RT. The mentioned equipment is used for conducting informational and educational campaigns on malaria, improvement of monitoring system, registration and data collection and capacity building of national laboratory services.

Strengthening and capacity building of human resources.

Human resources is a key success factor for implmeneting the project on the high quality level. Thus, project has always aimed and provides a set of capacity building activities, such as motivating SRs' employees by paying top-ups to the governmental salaries, conducting a variety of training and other educational sessions, sending SRs' staff to various study tours and international conferences, as well as providing as much possible basic tools for the working environment.

During the reporting period, RTDC has conducted 11 seminars and training courses for 686 health workers, including data base specialists. Besides, 3 entomologists and 3 parasitologists have attended the seminars held in Moscow on "blood sucking dipterous insects as specific and mechanic vectors and methods of pest control" and "Problems in malariology and actual problems in malaria elimination" topics.

Nº	Name of trainings	Number of participants	Pre-test %	Post-test %	Increase of knowledge %
1	Epidemiology, treatment and prevention of malaria	300	56%	93%	37%
2	Laboratory diagnostics	21	0.75%	98,6%	97.85%
3	Refresh courses on lab diagnostics	40	56,4%	85.20%	28,8%
4	Epidemiology of Malaria for parasitologists and epidemiologists	19	52.00%	81.60%	29,6%
5	Epidemiology, clinic, treatment and prevention of malaria for the health specialists of Army forces	17	61.0%	82,0%	21,0%
6	Vectors resistance to insecticide	20	61,8%	83,6%	21,8%
7	Malaria vectors in Tajikistan and methods of fighting with them	40	52,5%	76,6%	24,1%
8	Use of Rapid Diagnostic Tests (RDT) in malaria diagnostic	81	27,55%	78,09%	50,54%
9	Elimination of local cases of malaria in Republic of Tajikistan	20	68,8%	82,8%	14%
10	Basic courses on computer literacy and use of data base on malaria	29	40%	75%	35%
11	Epidemiology, treatment and prevention of malaria for primary health care workers	60	34.7%	74.5%	42%
	Total	686			

Table 1. Number of trainings conducted and participants

National Coordination and development of partnership

At the end of October 2012, in order to achieve a more integrated approach in the malaria elimination, by support of GFATM malaria project, RTDC conducted Malaria Intersectoral Partner Forum with active participation of the NCC, Ministry of Health, Ministry of Education, Ministry of Labour and Social Security, Committee on Environmental Protection, Ministry of Melioration and Water Resources, Ministry of Agriculture, Ministry of Defence, Ministry of Internal Affairs and the Committee on border control, to discuss existing problems on malaria elimination project.

<u>Activity 2:</u> Strengthen the national surveillance system, including epidemic forecasting, early warning and response

Epidemiological surveillance of malaria is defined as the systematic collection, analysis and interpretation of data related to malaria, which is essential for planning, implementation end evaluation of malaria control. Epidemiological surveillance is also important for the timely dissemination of relevant information required for decision-making.

According to Indicator 2 of the Annual Work Plan, GFATM malaria project established epidemiological and operational malaria data base in all of 41 project districts based on Microsoft Access format. This data base can be assessed for any data related to elimination of local malaria transmission: national register of malaria cases, patient records, laboratory records, entomology records and data on vector control

activities. RTDC has conducted two 3-days training courses on data base and basic computer literacy for specialists of TDC centers on national and regional level.

In addition, M&E Specialist of GFATM Malaria project, Regional M&E Specialist of TDC and ICT/Data Base Specialist of PIU/UNDP conducted on – job coaching on basic computer literacy, database using, and data entry, collection and analyzing in 10 districts (Yavan, Temurmalik, Danghara, Farkhor, Hamadoni, Qubodiyon, Qumsangir, Rumi, Vakhsh, Bokhtar) of Khatlon Oblast, during the monitoring visits.

<u>Activity 3:</u> Improve coverage and quality of early diagnostics and prompt treatment services in the country

Improvement of diagnostics of malaria cases is key to ensure early diagnosis, prompt treatment and as a basis for a reliable surveillance system. Since the microscopy-based examination remains the best of methods for malaria diagnostics, laboratories of the public health facilities are rehabilitated and provided with necessary items for diagnostic issues, appropriate equipment and laboratory furniture. Also providing laboratories with RDTs, especially to remote health facilities, where microscopy is not possible can be considered as alternative way of microscopy in diagnostic of malaria. Besides, public health education activities in communities will further contribute to the early detection and prompt treatment of malaria cases.

Under this activity GFATM malaria project provided a wide range of refresh trainings for laboratory staff, training for new laboratory staff, providing trainings and refresh trainings for PMC healthcare workers and training for medical staff from military healthcare facilities.

During the reporting period, totally 33 cases of malaria were registered in the country, which is 45 cases less than for the same period in 2011 (78 cases). All the detected patients received qualified treatment according to National Protocol of malaria treatment.



Table 1. Comparison table of malaria morbidity for 2005-2015.

For 2012, RTDC has reported only 31 malaria P. vivax cases confirmed by microscopy in the country (out of which 13 cases were imported from other countries: Afghanistan-5; Palkistan-6; Nigeria-1; Guyana-1), 18 cases are local. According to final data of RTDC in 2012, 2 cases of P.Falciparum have been detected. These 2 cases have been imported from Nigeria and Sudan. The local transmission of P.Falciparum has not been registered since 2008.

<u>Activity 4:</u> Promote integrated vector management based on indoor residual spraying, larvivorous fish, long lasting insecticide treated Nets (LLITNs) and environmental management

Selective indoor residual spraying in active foci of malaria transmission

Vector control is a crucial preventive measure in strategy aiming at the interruption of malaria transmission. Republican Center for Preventive Disinfection (RCPD) conducted IRS campaign in districts with high and medium risk of malaria transmission.

Table 1. Brief information on Indoor Residual Spraying activities implemented during the year

Activity	Regions covered	Result
Indoor residual spraying (IRS)	The 1 st round of indoor residual spraying (IRS) was conducted in June in 19 highly malaria prone districts/148 villages of the country. For the areas with middle level risk of malaria a one-tour IRS was conducted in July, and 16 districts/98 villages/30,084 households were covered with this activity	In total, 83,856 (100%), out of 83,851 planned households were covered with IRS activities.

Providing long lasting insecticide treated nets (LLITNs) to selected populations in malaria prone areas

Distribution of bed nets (LLITNs) is also one of the important vector control activities. The bed nets distributed free of charge among populations living in the areas of high risk of malaria transmission. A total of 100 236 bed nets were distributed to 34 661 households with children below 5 years of age and / or pregnant women. Hence, distribution based on risk and needs, target households are identified via a household-based census in the communities.

Table 2. Brief information on distribution of LLITNs to selected populations

Activity	Regions covered	Result
Distribution of LLITNs	18 most malaria-prone districts of the country (Vakhdat, Rudaki, Shahrinav, Shahritus, Qabodiyon, Qumsangir, Jillikul, Panj, Rumi, Vakhsh, Jomi, Farkhor, Hamadoni, Vose, Danghara, Temurmalik, Shurobod and B. Gafurov).	In total, 100,236 bed-nets were distributed among people (34 661 households) of the country during the 2012 season of malaria

Anti-larval measures, including dissemination of larvivorous fish (Gambusia affinis)

The dissemination of G.Affinis fish in the rice fields and anaphelogenic reservoirs has really reduced the amount of mosquito larvae in malaria prone districts. RTDC has been conducting this activity in order to break the chain of life cycle of malaria mosquitoes. In this reporting period, G.Affinis fish has been distributed in eight districts, where rice planting is commonly used by the local population.

Table 3. Brief information gambusia affinis distribution implemented during the year

Activities	Regions covered	Result
Distribution of gambusia affinis fish	Eight districts (Qubodiyon, Jomi, Rumi, Qumsangir, Shahritus, Bokhtar, Farkhor and Vakhdat)	62.5 hectares of anophelogenic reservoirs and 755.6 hectares of rice fields were covered with the activity.



Table 4. Gambusia fish distribution by districts (hectares).

Malaria foci

According to RTDC, currently there are 231 malaria foci in the country. Out of the total number, 4 residual active foci, 75 residual inactive foci, 15 potential foci, 3 new active foci and 131 rehabilitated foci were identified in the country.

Out of the total number of foci, 22 foci are considered to be dangerous and the remaining foci (75) can resume, but RDTC reported that there was no any activity in these foci during the epidemiological season.



Figure 3. Malaria foci in the country for 2011-2012

Promotion of environmental management measures

Cleaning of collectors and water reservoirs helps to decrease malaria incidences in the area and it also has a positive impact from an agricultural perspective as it improves the water supply and reduces disruptions of underground waters – a primary cause of land salinity – in surrounding areas The area offices of UNDP Community Programme jointly with the local Hukumats of districts of Rumi, Jomi, Qabodiyon, Hamadoni, Vose, Farkhor have organized *c*leaning of drainage system.

Implementation of environment management projects, including de-silting of drainage systems, is the continuation of successful collaboration between local districts hukumats, jamoats, water departments and UNDP. The primary objective of such collaboration is to prevent the irrigation and drainage canals from turning into hotbeds of malaria, reduction of land salinization, water logging and to contribute to the improvement of the irrigation system in the affected areas. Moreover, cleaning of drainage collectors, as a component of anti mosquito and anti malaria campaign, will bring to elimination of malaria foci and decreasing of malaria infection among the population of the target areas.

Activities in ten project sites out of total seven jamoats were completed during the reporting period. Totally, one collector with total length of 5.10 km was cleaned in Doki village of Qabodiyon district, three collectors with total length of 6.40 km was cleaned in Yakatut, Pushkin, Sitorai Surkh villages of Jomi district, one collector with total length of 6.80 km was cleaned in Kalenin village of Rumi district, two collectors with total length of 5.00 km was cleaned in Yangi Yul and Gulobod villages of Hamadoni district, two collectors with total length of 4.80 km was cleaned in Muhojirobod and Jairali villages of Farkhor district and one collector with total length of 4.70 km in Voseobod village of Vose district. Activities implementation in all the project sites has been completed by 100% accordingly. The total length of the systems under cleaning is 32.80 km, including all the project sites fallen in the project target districts. Total number of beneficiaries benefited from this project is 26,439 including 13372 female from all 6 districts of Khatlon region.

<u>Activity 5:</u> Provide the evidence required to allow appropriate and effective malaria elimination strategies through a program of needs-based operational research

Activities planned under this task are part of the supportive environment for the NMEP. Essential evidence is obtained through conducting demand-driven research, on the basis of a research agenda developed by RTDC and other stakeholders. The project aims to improve the delivery of existing interventions and develop new innovative, cost-effective and locally adapted methods for the elimination of malaria transmission.

According to above description, an operational research on insecticide resistance in sentinel sites was carried out with the financial support of GFATM malaria project on July- September 2012 by specialists from the Republican Center to fight with tropical diseases and with technical assistance of WHO consultant. The study was conducted in 3 selected project areas: Temurmalik district (Safarboen and Davlashoen village), Bokhtar district (Shogadoev village) and Rudaki district (Sarob village) according to WHO protocol. Insecticides tested: cyfluthrin (filtering paper impregnated with the insecticide at concentration 0,15%), alphacypermethrin (0,05%), deltamethrin (0,05%), lambdacyhalothrin (0,05%) – synthetic pyrethroids, and malathion (5%) – organophosphate. According with the WHO protocol each test was carried out in four replications. The WHO consultant assisted the Republican Tropical Diseases Center on conducting the study on insecticide resistance. The results of the study show that there are no any signs of resistance to synthetic pyrethroids and malathion in Tajikistan.

Another operational research on the sensitivity and specificity of rapid tests (Care Start b Malaria HPR2/PLDH (P. Falciparum / P.vivax) COMBO GO161 Access Bio, inc.) in comparison with results of blood smears (microscopy) in active foci of malaria was conducted in four districts of the country: Vahdat, Kumsangir, Kabadiyan, and Dangara. Simultaneously, a diagnostic test with RDT was run. In order to avoid bias results, the blood sampling for thick and thin blood smears were taken and investigated from the sample of the same selected people. All smears were sent to the laboratories of the TDC centers for examination and analysis, i.e. for diagnostic purposes.Microscopic examination as well as blood sampling for RDT was performed by the same team of investigators. For conducting this research, a team of 6 people, comprising of a team leader and 5 medical staff from each pilot area was selected. In total 4 teams (24 people) were established.

The parasitological research was planned and conducted on "Identification of malaria prevalence level in B.Gafurov district and classification of cases and foci". There are 4000 blood slides taken, read and reexamined in the parasitological laboratory of RTDC. No any cases of malaria were found in taken blood slides. The study showed that no any parasite carriers among population in the foci of Gafurov district were detected. It is possible that next season no new cases of malaria will be registered in these foci.

<u>Activity 6:</u> To scale up Behavior Change Communication through the media and community mobilization strategy

An important part of the project is community mobilization and collaboration with the public health care sectors. The current interventions intending to strengthen community care and prevention are expanded via active involvement of communities and their partnership with the formal and informal health sectors.

Republican Center for formation of healthy life style in cooperation with local educational departments in the districts with involvement of community leaders (medical personnel, religious leaders,

representatives of mahallas and active women), and teachers have been improving the level of knowledge of schoolchildren and population about malaria and methods of fighting with this disease. The activities like "Little stars of health", round tables in jamoats, printing of special magazine "Shifo" and informational bulletin "Khayoti Solim" are very fruitful for improving the level of knowledge of schoolchildren and population about malaria.

In total, 31,950 schoolchildren have got education on malaria prevention. During the year, a total of 247,500 IEC materials were handed over to RCHLS for further dissemination among the population (health workers, school children and general population) of 15 pilot districts of the country. In addition, the population awareness on malaria prevention issues was increased through mass media (TV, Radio and newspapers).

IV. Implementation challenges

Over the project implementation in 2012, GFATM malaria project encountered a number of ongoing or current challenges. One of the main challenges facing on implementation of the project is high turnover of local governmental staff. As an example: due to low salary, RTDC have no good data base operators, to include all the data on timely basis. In order to motivate governmental employees, working under the Malaria project, such as management, reporting specialists, finance specialists, as well as M&E specialists of RTDC receive incentives. This is done in order to retain health care employees in their workplaces and increase their responsibility for the program results. The other motivation is conducting capacity building activities which GFATM Malaria project implemented as conducting a range of trainings and refresh trainings, round tables for SRs staff.

Another challenge faced by the project was lack of supervision and oversight capacity of some newly recruited SRs of the project. As such, the RCPD and PO Subhi Tandurusti have lacked the monitoring and control of main activities: the spraying of households and distribution of bednets. Both SRs were new to the project, and the first year of implementation revealed that RCPD was challenged by household members not allowing them to spray the residencies; by lack of skills of disinfectors and instructors to increase knowledge of population on necessity of IRS; and by not matching amounts of IRS left at the end of spraying season. As for Subhi Tandurusti, due to lack of time and people resources, the distribution of bednets were done with support of head of villages, that led to inadequate number of distributed LLITNs, i.e. misdistribution of the bed-nets. All bottlenecks described above were taken as lesson learnt and hard and soft measures are taken to avoid similar complications in the next malaria season.

High level of cash payments due to weak banking system of the country are also considering as a one of the main challenges. The main reason is no banks available in some of the remote districts; lack of services able to work through banks (for coffee break, lunch, DSAs); and keeping the huge amount of cash in office safe. This situation may have lead to fraud, corruption intransparent payment implications. In order to solve this problem the programme wrote an official letters to SR with instructions and recommendations, conducted refresher trainings for on financial and cash management twice a year and added new special terms and conditions to the Grant Agreements of SRs, in order to boost the bank payment mode. Besides, the finance specialist of the project conducted face-to-face trainings to SR representatives during submission and verification of financial reports and will continue in the future. The situation with bank transfer issues continues having positive trends for Malaria SRs. The progress for RTDC shows increase by 5 times in three quarters: from 5.5% (Q2) of bank payments to 10.5% (Q3) and to 26.5% (Q4).

V. Lessons learnt and next steps

The problem with missing households during the distribution of bed nets has occurred. During the monitoring LFA revealed that some household missed during bed-nets distribution. The reason is during the distribution process, these households were absent. PO "Subhi Tandurusti" gave these left bed-nets to chief of mahalla for further distribution, but during monitoring of LFA, these bed-nets were not distributed by the chief of mahalla. It was decided by the project, to include to the new contract of PO"Subhi Tandurusti" some activities on conducting monitoring after bed-nets distribution to avoid such issues in future. In addition, the specialists of the PO has taken some actions to track mahalla leaders, who mistakenly distributed the bed-nets. The justifications were taken from the mahalla leaders.

Missed household during IRS were revealed by PIU/UNDP and RTDC M&E specialists. During the monitoring visit, in Kulyab, Kurgan-Tyube, Kabodiyan, Pyanj, Vakhdat, Rumi, Muminobod, Bokhtar, Vakhsh and Jomi PIU/UNDP M&E specialist has found some missed and refused households during the IRS. According to recommendations and reports of PIU team, IRS activities were conducted in the missed households. There are some households of Kurgan-Tyube and Kulyab are officially refused IRS, and the SR has provided PIU/UNDP with official letters about refusal from the heads of households. It was planned by GFATM Malaria project in collaboration with RTDC, RCPD and RCHLS to strengthen informational-educational activities among population about the importance of vector control activities.