

ACTION CONTRE LA FAIM – CONGO BRAZZAVILLE

PRIMARY HEALTH CARE REVIVAL

FOR THE RETURNEES OF THE BOUENZA REGION REPUBLIC OF CONGO

Final activity report submitted to O.F.D.A. 15 March 2001 to 15 September 2001.

Grant N°HDA-G-00-01-000-23-00

I. EXECUTIVE SUMMARY

Organization: Action contre la Faim

Date:

12/2001

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ACF Mission in Congo Brazzaville has been closed at the end of September 2001

Program Title:

Primary health care revival for the returnees of the Bouenza Region

Grant N°:

HDA-G-00-01-00023-00

Location:

REPUBLIC OF CONGO, Bouenza Region (Mouyondzi and Madingou

districts)

Disaster

Civil War

Time period covered by this report: 15 March 2001 to 15 September 2001

Objective: To strengthen the technical capacity (both preventive and curative) of the medical structures and the water coverage in the Health Center rural area in Mouyondzi and Madingou districts

II. PROGRAM OVERVIEW

A. Program Goal & Objectives

Program goal

To reduce mortality and morbidity due to current diseases found in Mouyondzi and Madingou districts health structures.

Objective:

To strengthen the technical capacity (both preventive and curative) of the medical structures and the water coverage in the health center rural areas in Mouyondzi district

Size of Targeted population: 74,000 persons (estimation of the district' population)

Period: 6 months + 1 month extension, i.e. 7 mois

Expected results: Operational structures with staff trained, quality of medical care provided and

drugs continuously available

Acceptable vaccination rate (3 immunizations per child per year and 2 tetanus

immunization per women per year)

Acceptable medical coverage (1consultation per person and per year in health

centers plus corresponding health posts).

Community and district team sensitized to cost recovery

| Baseline | Target |
|----------------|--|
| 2761 | 37 000 |
| 6000 | 22 320 |
| n/a | 14 880 |
| 12 | 32 |
| 40 | 109 |
| in process | 4 |
| in process | 1 |
| none | 10 |
| none | 1 |
| Hospital | Hospital |
| lealth centers | Health centers |
| | Health posts |
| | 2761 6000 n/a 12 40 in process in process none none Hospital |

B. Targeted population

The beneficiaries of this program are the inhabitants of Mouyondzi district. During the conflict the population has been living into the forest for months, with an unbalanced diet mainly based on Cassava. All villages have been looted, generally leaving people with nothing, neither tools or basic goods. Back to their villages 6 months ago, they roughly rebuilt there houses and planted around. Yet, the socio-economic level remains today extremely poor. Those of the most remote areas are the most affected.

Date:

C. Geographic locations

Organization:

Action contre la Faim (ACF)

March 2001 to September 2001

Country:

Republic of Congo

Places:

Mouyondzi District, Bouenza region

Longitude: 14° East Latitude: 4° South

Madingou District, Bouenza Region

III. PROGRAM PERFORMANCE

Context

The political situation remains fragile in Congo Brazzaville, with a difficult consensus to reach between opposition and government. The opposition "Conseil National de la Resistance" has been always cooperative with us in order to deploy our programs in remote areas mainly controlled by themselves up to the end of the year.

The security situation is improving, consolidated by the national army deployment on all the national territory, free movements was allowed from July to extend our programs, even in gray zones controlled by militias.

The humanitarian situation is improving, which is mainly due to a strong NGO's coordination and an adequate coverage of the needs. The results in term of mortality and morbidity are back to normal rates.

III.1. Improvement of the admission conditions and reinforcement of the technical capacities of rural medical structures

A. Operational structures with staff trained, quality of medical care provided and drugs continuously available

The program has been implemented following the institutional organization hold out by the MOH and the Bouenza RHD (Regional Health Direction) named the Plan National de Développement Sanitaire (PNDS / HDNP). ACF implemented the programs in Mouyondzi district that means Mouyondzi socio-sanitary circumscription (SSC).

| Hospital of reference | HC of reference | Health post Selected |
|-----------------------|---|---|
| Mouyondzi (Hosp) | Mouyondzi HC (to be physically separated from the hosp) | |
| | Yamba | Moutele, Nkila Ntari |
| | Tsiaki | Nkaa and Pono (to be promoted into IHC) |
| | Kingoué | Tabah Matsiti, Kingouala and Makala (to be promoted into IHC) |
| | Kingoye II | |
| Madingou (Hosp) | Mabombo | |

The HNDP action plan 2001 - 2002 divided the Mouyondzi SSC into 13 "Health Area" headed by one Integrated HCC. 5 HC were just upgraded into IHC: Tsiaki, Kingoué, Yamba, Mouyondzi and Kingoye II. Pono and Makala HP were to be upgraded into IHC. ACF intervened into those and the area – related other HP.

Mabombo health center access was very difficult, so the intervention was limited in providing drugs, and medical equipment.

Regarding the PHPs, eight have been chosen according to the following criteria:

- population figures around the health post (between 2500 and 5000 persons in a 10 kilometers area around the health post).
- Presence of community health workers able to follow the training
- Presence of a CSI for reference
- Population motivation

Activity 1: Rehabilitation of 1 Health Center, 8 Health Posts, 2 Maternities; Furniture supplying; Community participation.

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All buildings suffered from war, looting, lack of maintenance and weather conditions (humidity). Furthermore, most of them were quickly built, that means without real basement or base-ground. Some of the building are entirely built of wood and damaged fast and easily by weather and insects.

The different works were executed as follows:

| Location | Beginning of works | End of works | Works |
|------------------------|--------------------|---------------------|--|
| Pono Health Post | June 26, 01 | July 19, 01 | Carpentry: Roof repair, framework, ceiling, making of seven windows and one door, building security. Building work: floor and wall cracks repair. Paint work: External chalk layer, two internal and external paint layers, double ceiling painting. |
| Nkaa Health Post | June 27, 01 | September 02, 01 | Carpentry: Roof repair, making of one door, windows and doors repair, ceiling making with tarpaulin, building security. Building work: Plaster on two fronts, floor repair, veranda, building basement. Paint work: white wash layer on two fronts, Two external and internal paint layers. |
| Tsiaki Maternity | August 16, 01 | September 17, | Carpentry: ceiling. Paint work: Two external and internal paint layers. |
| Taba Health Post | June, 09 01 | June, 17 01 | Carpentry: roof repair, ceiling with plywood and tarpaulin, building security. Building work: floor and wall cracks repair. Paint work: chalk layer, two external, internal and double ceiling paint layers |
| Matsiti Health Post | July 05, 01 | July, 19 01 | Carpentry: making of three doors and three windows, building security. Building work: basement and floor building. Paint work: two external paint layers. |
| Makala Health Post | June 11, 01 | July, 04 01 | Carpentry: roof repair, double ceiling with plastic sheets, making of four windows, building security. Building work: External and internal plaster, internal ground building, basement strengthening. Paint work: Two internal and external chalk layers, one paint layer on the outer walls' low part. |
| Makala Maternity | August 26, 01 | September 10, 01 | Carpentry: roof repair, building security Building work: external and internal plaster, basement and building floor. Paint work: Two internal and external chalk layers, One paint layer on the low part of the outer wall |

| Nkila-Ntari Health Post | June 14, 01 | July 07, 01 | Carpentry: roof and framework repair, making of four doors and six windows, building security. Building work: External and internal plaster, floor and veranda's building basement. Paint work: Two internal and external chalk layers, one paint layer on the outer wall's low part. |
|----------------------------|-------------|---------------|---|
| Mountele Health Post | June 25, 01 | August 18, 01 | Carpentry: building security, ceiling with plastic sheets. Building work: Internal and external repair, basement strengthening, building of poles holding up roof, external walls and stairs. Paint work: External chalk layer, two external paint layers. |
| Kingouala Health Post | June 28, 01 | August 18, 01 | Carpentry: roof repair, making of two doors and seven windows, double ceiling with plastic sheets, building security. Building work: building floor, walls cracks repair, basement strengthening Paint work: External chalk layer, two external paint layers. |
| Mabombo Health Center | July 27, 01 | August 18, 01 | Carpentry: Roof and framework repair, making of three doors and six windows, double ceiling with plastic sheets, building security. Building work: floor and walls cracks repair Paint work: External and internal chalk layer and two paint layers |

The whole health structure, as for most of the building fled during the war, suffered from looting. Everything has been resold or use as firewood. Medical and structure furniture were delivered as follows:

| Furniture | Pono HP | Nkaa HP | Tsiaki M | Taba HP | Matsiti HP | Makala HP | Makala M | Nkila Ntari HP | Moutele HP | Kingouala HP | | | Kingoue HC | Kingoye II HC |
|--------------------|------------|------------|----------|------------|---------------|--------------|-------------|-------------------|---------------|-----------------|---|----------|---------------|--|
| Desk | 2 | 2 | | 1 | 2 | 1 | 1 | 3 | 3 | 2 | | 4 | 1 | |
| Consultation table | 1 | 1 | | 1 | 1 | 1 | | 1 | 1 | 1 | | | <u> </u> | 1 |
| Chair | 5 | 7 | | 6 | 6 | 2 | 2 | 5 | 6 | 6 | | 4 | 2 | |
| Stool | 1 | 1 | | | <u> </u> | | | | | | · | <u> </u> | | |
| Bench | 2 | 2 | | 3 | 2 | 1 | | 1 | 1 | 2 | 1 | 1 | | |
| Delivery bed | | | | | 1 | 1 | | | 1 | 1 | | | | |
| Observation bed | | 3 | | 4 | 3 | 2 | | | | .3 | | | | |
| Mattress | 2 | 2 | 1 | 2 | 2 | | | 2 | 2 | 2 | | | | |
| Mat | | 4 | 3 | 4 | 4 | 4 | | 4 | 4 | 4 | | | | |
| Chest | 1 | 2 | | | 2 | 1 | 1 | 1 | 2 | 1 | 1 | 1 | | 1 |
| Shelf | | 1 | | | | - | | | | | | 3 | 1 | • • • • • • • • • • • • • • • • • • • |
| Petrol lamp | 2 | 2 | <u> </u> | 2 | 2 | 2 | | 2 | 2 | 2 | | | | |
| Table shelf | | | | | | | | | | | | | | |
| Height board | 1 | 1 | | 1 | 1 | 1 | | 1 | 1 | 1 | | 1 | 1 | |
| Incinerator | 1 | 1 | | 1 | 1 | 1 | | 1 | 1 | 1 | 1 | - | - | · · · · · · · · · · · · · · · · · · · |

Community participation:

Some tools were given in locations made difficult to access by the very bad state of roads in order to encourage villagers to repair them and have therefore better communication. They were strongly encouraged by local authorities who helped to organize the works.

ACF teams took advantage of this policy to reach the different villages in better conditions to implement the programs. Mabombo IHC and area was until very late remotely accessible. This delayed ACF teams intervention capacity in every program; and the population showed its great concern by rehabilitating 3 bridges and almost all the road there.

| Location | Cutlass | Hoes | Shovel | Axe | Rake | Wheelbarrow |
|------------------------|---------|------|--------|-----|------|-------------|
| Nkaa | 6 | 6 | 6 | 6 | 6 | |
| Pono | 8 | 6 | 10 | 6 | 6 | 1 |
| Kindzoumba Taba | 6 | 6 | 6 | 6 | 6 | |
| Kiniangui Mouyondzi | 5 | 5 | 5 | 4 | 5 | |
| Mbello Mouyondzi | 6 | 6 | 6 | 6 | 6 | |
| Moukala Mouyondzi | 6 | 6 | 6 | 6 | 6 | 1 |
| Mtsemde Yamba | 4 | . 6 | 6 | 6 | 6 | |
| Kitou Kingoué | 6 | 6 | 6 | 6 | 6 | |
| Kiboto Tsiaki | 6 | 6 | 6 | 6 | 6 | |
| Tsomono Tsiaki | 6 | 6 | 6 | 6 | 6 | |
| Makala Mabombo | 6 | 6 | 6 | 6 | 6 | |
| Mbounou Mabombo | 6 | 6 | 6 | 6 | 6 | |
| Louboto | | 5 | 7 | 6 | 5 | |
| Boussoumouna Mouyondzi | | 4 | 10 | 5 | | |

Activity 2: Drugs and medical material supply

Drugs and material supplying has been made in parallel with staff training and reorganization of the structure.

A first activity revival stock based on 3 months estimated consumption and 1 month logistic delay buffer stock was early delivered, corresponding to the Health Ministry list of drugs.

Then the drugs and material deliveries followed the improvement of the medical staff's level as far as diagnosis, medical acts and pharmacy management were added. At the end of the program and accompanying the cost sharing system setting up, a three months drug consumption stock was delivered to each structure.

Special donations (little surgery and hygiene material, first emergency drugs) were made to the following HPs: Boussoumouna, Mfila, Massangui, Kimboto, Kithou, Kinkoula, Zabata and Moussengué in Mouyondzi SSC, and Kimfikou in Madingou SSC (Mabombo axis) (see annex 1).

During the pharmacy management training, ACF set up with the RHD a drug and material supply chain involving HPs, IHC and HC and the reference hospital. The drugs orders for a SSC should be processed regularly (at least 3-monthly) prior to the national public drug supplier at Brazzaville (CENAMES) in order to generate a scale economy and to take the delivery delay into account.

Activity 3- Staff training and recognition

IHC staff was trained by ACF team (2 doctors, 2 nurses, 2 auxiliaries and a pharmacist) plus the district team with a thorough theory and practical medical and nursery training of 4 hours per week on the following themes:

- Medical and gynecologic examination
- Main medical reasons for consultation: (fever, diarrhea, cough, parasitic diseases, skin diseases, sexually transmitted diseases).
- Health and hygiene education.

A specific ordinogramme was designed for the IHC and HP medical and paramedical staff for proper diagnosis, use of drugs and following of the reference chain (HP to IHC to reference hospital).

The HP and IHC staff received as well a non medical training-on-the-job consisting in: pharmacy stock management, epidemiologic survey and reporting, cash management and reporting. As the cost sharing system was to be set up, they needed to be able to inform the Health Committee and the Health authorities about inputs, outputs and needs. Transparency (especially financial) was strongly required by all the health chain actors.

Furthermore, the medical doctor head of the SSC will be in charge of the training on the specific health management tools.

According to a discussion with the medical doctor head of the Socio Sanitary Circumscription, the 87 Community Medical Agents trained have been allowed to have same examination than those trained directly by the Bouenza Regional Health Direction that should be organized at the end of September 2001. Continuing the first stage of the medical program, ACF maintained a « food for work » program in cooperation with UN-WFP with main goal to regularize and structure the voluntary Community Health Agents activity. 30 persons received 90 days dry food packages.

At the end of the intervention, 8 PHPs are operational in the district.

B. Reinforcement of the vaccination in Mouyondzi district

Immunization activities in Mouyondzi district were almost stopped down these last three years of socio-political trouble. The Expended Program on Immunization (EPI) of Madingou (regional) and Mouyondzi (local) were in revival stage at the beginning of 2001.

ACF insisted on reinforcing the local EPI capacities as routine immunization was concerned procuring logistical and technical help.

The regional cold chain was set up again by providing fridges, iceboxes, vaccine carriers from the National EPI in Brazzaville. Furthermore, vaccination material (vaccines and needles) were provided as well.

Then other way of reinforcing vaccination was through massive campaigns.

ACF medical team first round of an immunization campaign began at the end of 2000. BCG (1626), measles (3734), polio (3534) and DTC (5742) were administrated.

In March 2001, because of the proximity of a 4 countries wide UNICEF vaccination campaign against poliomyelitis, only 5524 children were vaccinated over 6363 registrated.

798 pregnant women were vaccinated, among them 743 had already received a first antitetanic vaccin.

In August 2001 was held a partial vaccination round. Only the very remote locations including Pygmies communities were concerned: different VHC information confirmed ACF medical teams assumptions that lots of Pygmies (namely around Tsiaki) did not have access to immunization.

Finally, during April, May and June, a measles epidemic occurred in Kingoue district (see annex 2). More than 600 cases occurred, as only one death was recorded, most of the cases being mild cases among affecting all the category of ages.

With the support of the head of Mouyoudzi SSC, some measures to reinforce the local treatment capacity were taken: setting up an epidemiologic surveillance system, drugs delivery to the relevant health structures including the PHPs, sensitization of the population and health staff and advanced vaccinations strategy from Kingoue CSI.

At the end of the program, 6 permanent vaccination posts are operational in the area (including Mabombo).

C. Acceptable medical coverage (1 consultation per person and per year in health centers plus corresponding health posts).

Between February and June (5 months), 8088 consultations have been realized in the hospital and 9193 in the health centers (17 281 in total).

As the standard of consultations in developing countries is ½ consultation/person/year and the target population in Mouyondzi district is 74 000, this corresponds to the norm (target population corresponding to the 6 months program duration is 18500).

Main infectious diseases diagnosed were : schistosomiasis, filariasis, sexually transmitted diseases, respiratory infections and malaria.

Regarding EPI diseases, measles was the main one diagnosed and whooping cough is found but more scarcely.

Finally, very few cases of severe malnutrition (between 0 and 5) are treated monthly in the pediatrics hospitals service.

Regarding the hospital, ACF decreased during 2001 its original support to a weekly supervision visit dedicated to drugs management supervision, support to the nutrition treatment unit and practical training to health workers.

D. Community and district team sensitized to cost recovery

Prior to everything was an economic survey on the financial capacities of the villagers and the organization of their participation in the health structures management.

The different price tables and the tarification system were drawn and designed in collaboration with the medical doctor – head of Mouyondzi SSC and the regional health Director. ACF was allowed to anticipate the launching of the NHDP in Mouyondzi SSC although it was scheduled for 2002 - 2003 for logistics reasons

The cost sharing system is aimed to cover all the costs generated by the health structure's activity, mainly drug supply. The management techniques and files are designed to be easy – to – use and to ensure transparency.

The SSC management team was then officially set up by the regional health Director with ACF as special technical partner. It wrote the SSC Operational Plan approved by the Director:

- Organize the SSC management
- Provide the team with a place and equipment.
- Have the SSC fully operational
- Promote the « Community Participation » to the IHC common management.

Five « health areas » were identified: Kingoué, Tsiaki and Yamba HP where ACF was already working needed to be rationalized to be turned into ICH.

Mouyondzi IHC was to be created to separate primary health care from secondary health care carried into the hospital. The population itself supported Kingoye II to be operational again. This community initiative was to be helped through rationalization.

The SSC management team went along with ACF team to supervise the rationalization process in the 5 IHC. The medical doctor – head of the SSC proceeded first as follows:

- Population and administrative authorities sensitization to the NHDP according to the « initiative de Bamako".
- Setting up of village health committees representative of the health population covered by the health structure.
- Explanation of the role of the Initial Financial Participation.

Meetings were organized in order to inform the populations about ACF's action and the HNDP. Community - based Village Health Committees (VHC) were progressively set up which elected the executive cabinets and were trained and informed about health and health structure management.

Weekly sessions allowed to write and adopt the VHC internal rules, the health structure's operational plan, the management and activity supervision forms and the tarification.

First action of the VHCs was to census the covered population in order to prepare the collect of the "Initial financial contribution". This sum should serve as working cash for the health structure. IFC non payers (who are supposed to be temporarily in the area) should pay a fee in addition to the cure price.

The IHC management teams were identified by the medical doctor – head of SSC together with the VHC. These are composed of: a nurse – head of center, a social – medical assistant, a midwife or a birth attendant and a clerk.

In the 5 ICHs the price system is by medical act and by drug delivery.

The 8 HPs began their activities directly with a cost sharing system. Tarification is by "disease episode" rather than by medical act or drug delivery.

The biweekly ACF teams visits allowed to continue the HDNP sensitization of the population, to supervise VHCs and HPs technical staff.

III. 2. Supplying of access to drinkable water to the population covered by the rural medical structures.

A. Rehabilitation and building of water points

Locations and interventions

| Location | Kind of intervention | Beginning schedule | End schedule | Water extracting system |
|-----------------------------|--|--------------------|-----------------|-------------------------|
| Yamba | High yield well equipped with hand pump | 24/04/01 | 10/08/01 | India Mark II hand pump |
| Mabombo | High yield well equipped with hand pump | 08/06/01 | 04/07/01 | India Mark II hand pump |
| Tsiaki | High yield well equipped with hand pump | 27/04/01 | 05/07/01 | India Mark II hand pump |
| Kingoué | High yield well equipped with hand pump | 17/08/01 | 10/01 | India Mark II hand pump |
| Nkila-Ntari | High yield well | 02/08/01 | 08/09/01 | Pulley |
| Kingoye II | High yield well | 02/08/01 | 08/09/01 | Pulley |
| Bored well Mouyondzi CEG | Pump rehabilitation and external concrete slab building. | 10/08/01 | 16/08/01 | Kardia hand pump |

Technical overview and data

During a first phase of project setting up, the populations were sensitized to actively participate in the building, the management and the general maintenance (hygiene) of the water points. Therefore, ACF obtained a "community participation" consisting in building materials (sand, gravel, stone breaking...) and secure shelter for the tools and workers.

Being supplied with proper and enough building materials was, even then, very hard. As carriers were hard to be found, gravel, crush rock and sand should be taken directly from rivers or produced by the population. Peasantry and mud brick building background (poor technical capacity), lack of appropriate tools (hammers, shovels and wheelbarrows), medium quality of stone made harder to obtain a sufficient amount of material.

Once the precise location chosen, the high yield well is first dig down to the water table with 1, 40 m diameter. The hole is then protected by a piling up of 10cm culverts (concrete rings)

In order to ensure a water column big enough, to ensure an appropriate yield whatever the season, the well is dug some more (3 to 5 m depth; 1m diameter). These end parts of the holes are usually built with schist blocks but ACF teams improved the system by using a 70 cm wooden makeshift inlet filtered matrix. This system lessened the wall collapsing risks and quickened the building work, which then consisted in piling down concrete rings bored to permit water table collection.

Technical data table:

| Location | Depth (m) | Water static level (m) | Volume (m3) | Complete water filling time (H) | Water filling speed (m/H) |
|---------------|--------------|---------------------------|-------------------|---------------------------------|------------------------------|
| Yamba | 18 | 12 | 4,7 | 16 hours | 0,29 m3/H |
| Mabombo | 6,5 | 5,5 (June 01) | 1,13 | 9 hours | 0,125 m3/H |
| Tsiaki | 12,5 | 10 | 2 | 24 hours | 0,08 m3/H |
| Kingoué | 16 | 9 | 5,5 | 16 hours | 0,34 m3/H |
| Nkila Ntari | 12,5 | 8 | 5 | 18 hours | 0,3 m3/H |
| Kingoye II | 10 | 7 | 3,4 | 8 hours | 0,42 m3/H |
| Bore hole | Non ava | ilable data. | • | | |
| Mouyondzi CEG | Neverth | eless, the bore ho | le provides water | 24 hours per day. | |

Water points management

In order to insure that these water points will be as sustainable as possible, a community – based water point management committee was set up for each water point composed as follows:

President and vice - president,

Secretary

Maintenance officer, and technical agent.

Hygiene officer

Named by the population in a general meeting of the concern community (organized by ACF education team), the committee is in charge of the following responsibilities:

- Proper use of the water point and hygiene of the surrounding area:

The water point has to be carefully used and the surrounding area has to be cleared and made free from any animal occupation or rubbish deposit. For that purpose a protected area will be set up around the water points.

The hygiene officer was provided with and education kit (see Hygiene and health education below); on the purpose to be as well a relay of the hygiene principles within the community.

Maintenance:

The committee has to be able to operate the current maintenance of the pumps. In this prospective, a tool box and some spare parts were delivered to each committee. In form of training, the maintenance teams were as well invited to follow the well digging and the pump assembly.

ACF made it sure that the water points be considered as strictly community - based and then that the provided water should be free of charge for whoever come. As a matter of fact, the ground where the wells are dig generally belong to the health structure in the vicinity, and therefore public.

B. Health and Hygiene education / animation

ACF animators began even before the beginning of the rehabilitation and hydraulic construction work to intervene within the villages: to sensitize the population, to obtain the "community participation", to engage the process of election of Water point Committees and to prepare the hygiene and health education program with a rough survey.

Preliminary survey

Failing of a complete survey, ACF education team made a short assessment in order to know the main health issues and the behaviors causing them.

The main findings were:

- Environment : lack of cleanness : the parcels are often unattended.

Lack of latrines, non use of existing latrines (people prefer to go to the surroundings).

Lack of protected water points. Lack of wells and most of them are or badly maintained....

Schistosomiasis

Water points shared by humans and animals.

- Personal hygiene: lack of personal hygiene (scarce hand washing, few baths per week...).
- Main diseases: diarrheas, skin diseases, cough, intestinal infections, malaria. Causes and way of treatment are often unknown.

The main causes of "bad habits" are ignorance and continuation of elders' behavior. Furthermore, people often do not have enough money to build latrines or maintain the wells in their parcels.

Developed themes :

The point was to complete the hygiene message with a general health education. Lots of water and sanitation related diseases are as well related to the ignorance or the non observation of basic health rules. The educators tried to catch the biggest amount of population, especially in remote or difficult-to-access areas.

Hygiene

- Water hygiene: drinkable and non drinkable water definition: Population were to be oriented to take water from ACF's built or rehabilitated water points, and to chose properly and maintain existing water points.
 - Water points owners and water point committees were specially sensitized to the necessity of keeping a clean water point surrounding.
- Use and treatment of water: How and where to take, transport, store, make potable, use and dispose water avoiding to soil it or to pollute environment and water point.
- Water and sanitation diseases: Show the links between water and water use and this diseases. Definition, transmission mode, way or cure and prevention..
- Water borne diseases transmission: Definition, transmission mode, way or cure and prevention.
 Necessity to build, use and maintain latrines.
- Diarrhea and dehydration: inform parents on the consequences of such diseases on children, and on what to do in case.
- Schistosomiasis: definition, transmission mode, way or cure and prevention.
- Environment hygiene: How and why maintain and not soil environment.
- Personal hygiene.

Health

- Pre-birth consultation and pregnancy follow-up: Necessity of mother and child medical follow up.
- Pregnant women often avoid to be followed-up in health structures and prefer to give birth at home confiding in the traditional obstetricians.
- Family planning: How and why reduce pregnancy frequency and number in order to improve the quality of life and reduce mother and child mortality and morbidity rate.
- Role of vaccination: vaccination is often related to bewitchery, demonstration of its importance for health.
- STD's and AIDs: Definition, transmission mode and prevention.
- Drug addiction and alcoholism : Definition and consequences.

Methodology of the education sessions

- Group education: general education session for a max 10 people group (i.e. women, peasants, men, children...).
- Door to door: Direct discussion with the families in their living environment. This protocol takes
 more time but allows to better observe peoples' customs and to knows their grounds. This
 protocol is the best one to detect "social cases".
- « Social cases »: 27 "social cases" were identified during the education sessions. Most of them through the «door to door protocol.
- "Social cases" detection allowed to have general measures to be taken in order to lessen disease risks (protection of a diarrhea-spreading water point in Tsiaki).
- Private wells chlorination: due to the detection of coliformes in Nkila Ntari, Kingoye II, Kingoué
 and Mabombo water points, 31 private well disinfections by chlorination were launched. The
 wells' owners and the surrounding population were invited to follow education sessions.
- Primary and secondary schools: Teaching teams appreciated ACF educators' interventions as
 they were very well adapted to the public's age and level. ACF educators elaborated games with
 the pupils and integrate their session in the elders' lessons.
 Yamba primary school (584 pupils), Yamba secondary school (150 pupils), Tsiaki secondary
 school (300 pupils) were concerned by the intervention.

Hygiene education sessions were held as follows:

| Location | Nbr sessions | Audience | Men | Women | Children |
|-------------|--------------|----------|-----|-------|----------|
| Kingoué | 20 | 1 012 | 287 | 304 | 421 |
| Tsiaki | 16 | 1 471 | 474 | 467 | 530 |
| Yamba | 13 | 776 | 207 | 273 | 296 |
| Mabombo | 3 | 173 | 45 | 77 | 51 |
| Kingoye II | 4 | 156 | 57 | 64 | 35 |
| Nkila Ntari | 6 | 233 | 75 | 162 | 56 |

Health education sessions were held as follows:

| Location | Nbr sessions | Audience | Men | Women | Children | Life guards |
|-------------|--------------|----------|-----|-------|----------|-------------|
| Yamba | 1 | 23 | 10 | 13 | | |
| Pono | 1 | 174 | 29 | 83 | 62 | |
| Nkila Ntari | 1 | 117 | 41 | 53 | 23 | |
| Tsiaki | 1 | 162 | 37 | 96 | 29 | |
| Nkaa | 1 | 44 | 15 | 25 | | 4 |
| Kingoué | 2 | 106 | 40 | 53 | | 13 |
| Kingouala | 2 | 68 | 19 | 27 | 15 | 7 |
| Moutélé | 1 | 43 | 9 | 21 | 13 | |

| Makala | 1 | 71 | 23 | 17 | 31 | |
|------------|---|----|----|----|----|--|
| Kingoye II | 1 | 58 | 18 | 28 | 12 | |
| Matsiti | 1 | 45 | 14 | 22 | 9 | |
| Taba | 1 | 62 | 19 | 28 | 15 | |

Animation sessions

Community hygiene and health animation sessions were organized within the villages in the form of dramas and games following a general presentation during great events such as water point inauguration, cultural evenings, action days...

This entertainment and spectacular way of intervention aims to give more impact to messages to a wider scale of public. 5 animation sessions were organized for a 814 people audience.

The animation sessions were held as follows:

| Location | Nbr sessions | Audience | Men | Women | Children |
|-------------|--------------|----------|-----|-------|----------|
| Tsiaki | 1 | 304 | 108 | 127 | 69 |
| Yamba | 1 | 206 | 71 | 93 | 42 |
| Kingoué | 1 | 148 | 41 | 63 | 44 |
| Nkila Ntari | 1 | 60 | 17 | 28 | 15 |
| Kingoye II | 1 | 96 | 34 | 42 | 20 |

Furthermore, ACF education team organized « Cultural evenings » at Tsiaki, Kingoué and Yamba in order to reach the population from the remote or difficult to aces surrounding areas.

All surrounding population were invited to follow animation sessions (dramas and general presentations) with performances of folkloric or theater groups. The total amount of present people was over 3000. Local authorities really appreciate such initiative.

For lack of time and logistic trouble, the events scheduled at Mabombo, Nkila Ntari et Kingoye II could not be organized.

CONCLUSION:

At the end of the intervention:

- 5 CSI are operational in Mouyondzi district (including one in Mouyondzi hospital) and 1 in Mabombo (Madingou district) has been equipped.
- 8 health posts (PHPs) are operational with staff trained.
- 6 vaccination posts are operational with relevant staff trained.
- The cost recovery system has been set up with the local health authorities: staff has been trained, village health committees have been designed and trained, a tarification has been chosen.

Water supply is ensured for th population covered by the rural medical structures.

During the same time, it has been decided by the Ministry of Health that the health national development plan (PNDS) has to be started in Mouyoudzi district with the nomination of a SSC operational plan and management team to implement this plan.

Now, all the basis are present to go further, specially regarding the implementation of the cost recovery process.

The main steps to be followed will be a regular drugs supply of the health structures, a regular supervision of the health staff plus an ongoing training plan through the SSC team.

The operational means given to this team plus the technical support through the Ministry of Health will be the key of the success.

ANNEXES

ANNEXE 1

DONATION TO THE HEALTH POSTS (PHPS)

ANNEXE 2

MOUYONDZI MEASLES EPIDEMIC

ANNEXE 3

EVOLUTION OF THE MEDICAL ACTIVITIES IN MOUYONDZI HOSPITAL AND HEALTH CENTERS

ANNEX 1: DONATION TO THE HEALTH POSTS (PHPs)

EQUIPEMENT (fabrication locale):

| Armoire à médicament | 1 |
|-----------------------------|---|
| Banc | 2 |
| Chaise | 4 |
| Lampe tempête | 2 |
| Lit | 4 |
| Mèches | 2 |
| Table bureau | 2 |
| Table d'accouchement | 1 |
| Table d'examen | 2 |
| Tablette (matériel médical) | 2 |

MATERIEL D'HYGIENE :

| Balai | 1 |
|---------------------------------|----|
| Bassine PM | 1 |
| Blouse | 4 |
| Brosse à ongles | 2 |
| Conteneur 10 L | 1 |
| Gants d'hygiène (paire) | 1 |
| Poubelle | 2 |
| Produit entretien des sol (5 L) | 1 |
| Racleur | 1 |
| Savon (rame) | 1 |
| Savon UNICEF | 10 |
| Seau | 3 |
| Serpillière | 4 |
| Serviette éponge | 6 |

MATERIEL DE PAPETERIE

| Cahier-registre A4 UNICEF | 5 |
|---|-----|
| Bloc note | 10 |
| Fiche de santé UNICEF | 500 |
| Ordinogramme | 1 |
| Pochette de protection pour fiche de santé UNICEF | 500 |
| Stylobille bleu | 10 |

MATERIEL MEDICAL:

| MATERIEL NON RENOUVELA Balance adulte | 1 | | | | |
|---------------------------------------|--------------------------------|---|--|--|--|
| Bol à coton | | | | | |
| Boite accouchement | Ciseaux | 1 | | | |
| | Pince à disséquer sans griffe | 1 | | | |
| | Pince Kocher sans griffe | 2 | | | |
| | Pince pote aiguille | 1 | | | |
| Boite petite chirurgie | Ciseaux | 1 | | | |
| | Pince à disséquer avec griffes | 1 | | | |
| | Pince à disséquer sans griffe | 1 | | | |
| | Pince Kocher avec griffes | 2 | | | |
| | Pince Kocher sans griffe | 2 | | | |
| | Pince pote aiguille | 1 | | | |
| | Porte lame | 1 | | | |
| Boit métallique grand modèle | | 1 | | | |
| Culotte salter | | 3 | | | |
| Cupule | | 2 | | | |
| Flacon plastique 1 L | | 2 | | | |
| Garrot élastique | | 1 | | | |
| Haricot | | 2 | | | |
| Mètre ruban | | 1 | | | |
| Otoscope | | 1 | | | |
| Plateau | | 2 | | | |

| Salter 25 kg | 1 |
|-------------------------|------|
| Spéculum | 1 |
| Stérilisateur | 1 |
| Stéthoscope adulte | 2 |
| Stéthoscope obstétrical | 1 |
| Tambour | 2 |
| Tensiomètre | 2 |
| Thermomètre | 10 |
| Toise | 1 |
| MATERIEL RENOUVELABLE | |
| Adhésif petite taille | 10 |
| Aiguille 21 G | 100 |
| Aiguille 23 G | 60 |
| Bandage 5x5 cm | 63 |
| Bandage élastique | 40 |
| Compresse non stérile | 900 |
| Compresse stérile | 90 |
| Coton 500 g | 1 |
| Doigtier 2 doigts | 315 |
| Epicrânienne 21 G | 36 |
| Epicrânienne 23 G | 36 |
| Gants non stériles | 100 |
| Gants stériles N°7.5 | 20 |
| Gants stériles N°8 | 16 |
| Lame scalpel 11 | 20 |
| Sachet médicaments | 2000 |
| Seringue 2 ml | 50 |
| Seringue 10 ml | 100 |
| Tubulure | 72 |
| Vicryl 2/0 | 20 |
| Vicryl 3/0 | 20 |

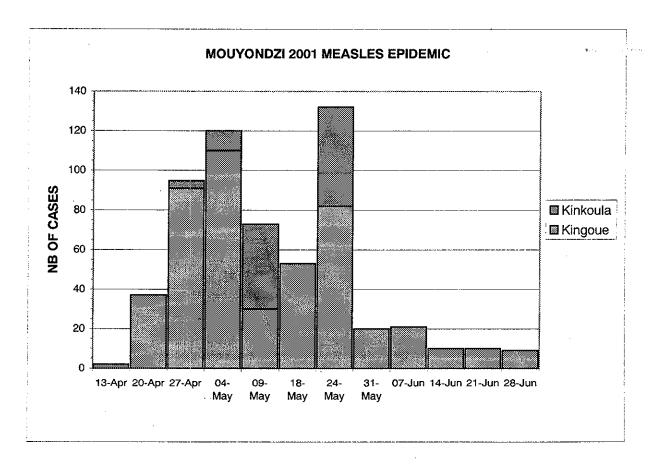
MEDICAMENTS ESSENTIELS:

| PER OS | |
|-----------------------------------|------|
| AAS 300 mg | 2000 |
| Aluminium hydroxy 500 | 1000 |
| Amoxicilline 125 | 50 |
| Amoxicilline 500 | 1000 |
| Ampicilline 250 | 1500 |
| Ampicilline 500 | 2000 |
| Chloroquine 150 | 4000 |
| Cotrimoxazole 480 | 5000 |
| Fer sulfate 200-Acide folique 0.2 | 3000 |
| Griséofulvine 500 | 500 |
| Mébendazole 100 | 1000 |
| Métronidazole 250 | 1000 |
| Nystatine 100000 UI gynécologique | 200 |
| Paracétamol 100 | 1000 |
| Paracétamol 500 | 6000 |
| Pénicilline V 250 | 2000 |
| Prométhazine | 1000 |
| Quinine 300 | 4000 |
| SRO | 250 |
| INJECTABLE | |
| Diazepam 10 mg | 72 |
| Glucosé 5% 500ml | 36 |
| Méthylergomètrine 1ml* | 20 |
| Quinine 300 mg | 36 |
| Ringer lactate 500 ml | 36 |
| TOPIQUE | |
| Acide benzoïque 800 mg | 1 |
| Benzyl benzoate 25% 1L | 1 |
| Chlorhexidine 1L | 1 |
| Oxyde de zinc 800 mg | 1 |
| Povidone iodée 500 ml | 10 |
| Tetracycline pommade ophtalmique | 40 |

| Violet de gentiane | 9 |
|--------------------|---|

ANNEX 2: MOUYONDZI MEASLES EPIDEMIC

| New cases | 13-Apr | 20-Apr | 27-Apr | 04-May | 09-May | 18-May | 24-May | 31-May | 07-Jun | 14-Jun | 21-Jun | 28-Jun | TOTAL |
|-----------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|-------|
| Kingoue | 2 | 37 | 91 | 110 | 30 | 53 | 82 | 20 | 21 | 10 | 10 |) 9 | 475 |
| Kinkoula | | | 4 | 10 | | | | NC | NC | NC | NC | NC | 107 |
| Matsiti | | | | | | | | ***** | NC | NC | NC | NC | 51 |
| Zabata | | | | | | | | NC | NC | NC | NC | NC | 20 |
| TOTAL | 2 | 37 | 95 | 120 | 73 | 53 | 132 | 20 | 21 | 10 | 10 | 9 | 653 |



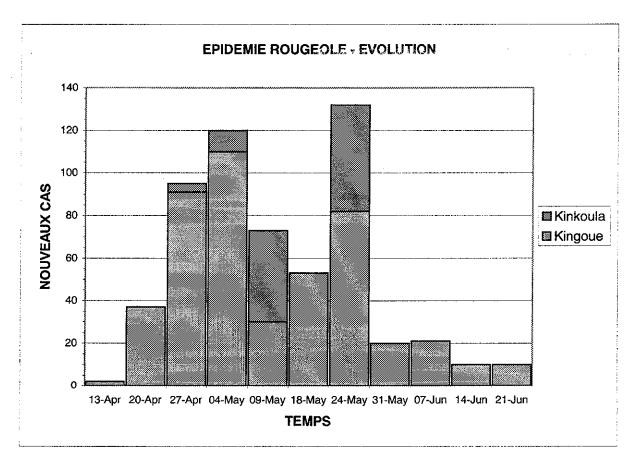
TSIAKI

| : | 11-Jun | 18-Jun |
|---------|--------|--------|
| Tsiaki | 2 | 0 |
| Tsomono | 3 | . 0 |

EPIDEMIE ROUGEOLE KINGOUE 2001

KINGOUE

| New cases | 13-Apr | 20-Apr | 27-Apr | 04-May | 09-May | 18-May | 24-May | 31-May | 07-Jun | 14-Jun | 21-Jun | TOTAL |
|-----------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|-------|
| Kingoue | 2 | 37 | 91 | 110 | 30 | 53 | 82 | 20 | 21 | 10 | 10 | 466 |
| Kinkoula | | | 4 | 10 | 43 | | 50 | NC | NC | NC | NC | 107 |
| Matsiti | | | | | | | | | NC | NC | NC | 51 |
| Zabata | | | | | · | | | NC | NC | NC | NC | 20 |
| TOTAL | 2 | 37 | 95 | 120 | 73 | 53 | 132 | 20 | 21 | 10 | 10 | 573 |

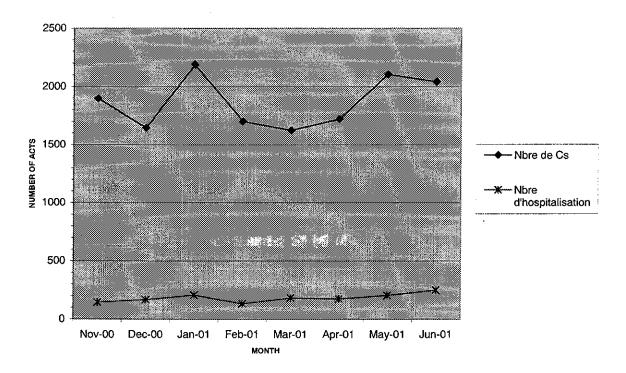


TSIAKI

| | ##### | ##### |
|---------|-------|-------|
| Tsiaki | 2 | 0 |
| Tsomono | 3 | 0 |

ANNEX 3: EVOLUTION OF THE MEDICAL ACTIVITIES IN MOUYONDZI HOSPITAL AND HEALTH CENTERS

MOUYONDZI HOSPITAL



MOUYONDZI HEALTH CENTERS

