1. PROJECT SUMMARY.

Title: Support at Nzara Hospital.

Location: Nzara, situated in Yambio county in the western Equatoria region of south Sudan.

Target Population: Population of Nzara countyl.

Purpose: Improved health status of the population of Nzara county through a OPD and Hospital.

Specific objectives:

Morbidity is reduced trought

- OPD Consultation
- Pharmacy.
- ART "HIV" Clinic
- IPD wards
- Laboratory and blood transfusion.
- Prevention of Parent to Child Transmission (PPTCT) package
- Gynecological Consultations
- Health and Hygiene Education and Information
- Involvement of community members in adult/child Health Programs
- Inpatient care
- Emergency Room
- Therapeutic Feeding Center
- Health and Hygiene Education

Staffs working in the project fulfill standards with quality control measures in place

- 1 monthly audit about any of the following subjects: fullfill the nursing charts, appropriate prescription practice, results of teaching, patient epidemiological data, morbidity, mortality.
- 1 monthly audit about .
- 1 yearly audit about universal precautions.
- Weekly training sessions.
- 2 weekly mortality meetings.
- Weekly medical meetings to discuss results of audits and reactions to those results.
- job descriptions for all medical staff and no medical.
- 1 Monthly audit on drug consumption and expense.

Working environment is up to standard for Medical activities and patient hospitalization in IPD and OPD of the Nzara Hospital.

- Identification of a site for the OT and construction of it.
- Rehabilitation of some hospital wards and support buildings.
- Construction waste area.
- Construction of laundry.
- Water and waste disposal management.
- Protocols for hospital hygiene and vector control.
- General maintenance and hospital management.

2. BACKGROUND.

2.1 South Sudan and regional background

General Information:

South Sudan attained independence from Sudan on July 09, 2011 after a referendum, becoming the newest country in the world. South Sudan is a member of the United Nations, African Union and the Intergovernmental Authority on Development (IGAD).

On March 3rd, 2016, the East African Community Secretariat declared South Sudan officially a member of the regional block. The country will remain an observer until issues around instability, governance and human rights record are addressed by the current leadership.

The oil rich country faced enormous setback with the civil war which began in December 2013. This conflicthas seen resulted in substantial loss of life and the displacement of over 2.3 million people from their homes.

Currently, 1.7 million people have been displaced from their homes while 640, 000 live in neighboring countries as refugees. In addition, there are almost 200,000 IDPs currently being hosted at the UN. Protection of Civilian (POC) sites in Juba, Bentiu, Melut, Malakal and Bor. The conflict has also resulted in massive destruction of property and infrastructure. The birth of the Republic of South Sudan is the culmination of a six-year peace process which began with the signing of the Comprehensive Peace Agreement (CPA) on 9 January 2005 between the Government of Sudan and the Sudan People's Liberation Movement (SPLM), which ended more than 20 years of war.

The United Nations Mission in Sudan (UNMIS) supported the implementation of the CPA during the interimperiod set up by the Government of Sudan and SPLM when the CPA was signed.

The CPA also called for a referendum to take place to determine the status of Southern Sudan. It was held on schedule in January 2011, with the overwhelming majority, 98.83% of participants, voting for independence. The Secretary-General welcomed the announcement of the final results stating that they were reflective of the will of the people of southern Sudan.

Following the end of this interim period, and the subsequent independence of South Sudan in July 2011, the Security Council established a new mission, the United Nations Mission in South Sudan (UNMISS) with the adoption of resolution 1996 (2011) on 8 July 2011.

Ethnicity, religions and languages:

South Sudan is home to around 60 indigenous ethnic groups and 80 linguistic partitions. Historically, most ethnic groups were lacking in formal Western political institutions, with land held by the community and elders acting as problem solvers and Adjudicators. Today, most ethnic groups still embrace a cattle culture in which livestock is the main measure of wealth and used for Bride wealth.

The majority of the tribes in South Sudan are of African heritage who practice either Christianity or syncretisms of Christian and Traditional African religion. There is a significant minority of people, primarily tribes of Arab heritage, who practice Islam. Most tribes of African heritage have at least one clan that has embraced Islam, and some clans of tribes of Arab heritage have embraced Christianity.

English and Arabic (which includes Juba) are the official languages, with significant regional language and dialects including Dinka, Nuer, Bari, Zandi, and Shilluk.

Political Background:

On 15 December 2013, violence broke out in South Sudan's capital Juba and quickly spread to other locations in the country resulting in deep nation-wide political and security crisis. Seven out of the country's ten states were affected by the conflict with Central Equatoria, Jonglei, Lakes, Unity and Upper Nile states being the hardest hit.

In addition, a few days into the crisis, the relationship between the Government and UNMISS started to grow increasingly tense, amid mounting anti-United Nations sentiment emanating from misperceptions about the Mission's role during the crisis. There were unfounded allegations that UNMISS was not impartial and that the Mission was aiding and abetting the anti-government forces. Hostile public statements were made by senior officials of the Government. The ability of UNMISS to move freely was increasingly obstructed.

Demonstrations against the United Nations were organized in several state capitals, including Rumbek (Lakes State) and Aweil (Northern Bahr el Ghazal State).

The crisis had widespread negative consequences for the human rights situation in many parts of the country, especially in areas of greatest military confrontation (in the national capital and in Jonglei, Upper Nile and Unity States). UNMISS estimated that thousands of people had been killed during the hostilities. Both parties to the conflict were responsible for ethnically targeted attacks on civilians and have failed to comply with international humanitarian and human rights law.

The humanitarian situation also deteriorated sharply. Within the first four weeks of the crisis, almost 500,000 persons were displaced within South Sudan and around 74,300 people had crossed into neighbouring countries. These numbers continued to grow, with total displacement by the end of February 2014 reaching 900,000 persons, some 167,000 of whom crossed into neighbouring countries. The number of civilians who had tipped into the "acute" or "emergency" categories of food insecurity had increased from 1.1 million to 3.2 million. In addition, some 500,000 displaced persons were in urgent need of food aid, which meant that the survival of 3.7 million South Sudanese was in question.

Illiteracy rates are high at 88% and 63% for women and men respectively. Although 57.% of 2Draft Nzara Sout Sudan 2.0.doc the population has access to improved water sources, 91% of citizens have no access to proper sanitation.

While the ratio of girls to boys attending primary school is 4:5, overall school enrolment is quite low at 18.8%.

Public infrastructure, such as roads and bridges, which are essential for service delivery, are lacking in most parts of the country, hence compromising access to over 60% of the population during rainy seasons. No national electricity grid or national energy system is in place. Health situation in South Sudan:

General comment.

Due to the war, health care activities have come to a total stop and are only recovering slowly with the ministry of health not being able to take over any responsibilities. Important indicators such as infant mortality rate or maternal mortality rate reflect the disastrous health situation at the moment. Public health services are delivered along a four-tier system, starting from the primary level to tertiary level. Most health infrastructures are dilapidated; essential medical and surgical equipment outdated or lacking. Management and human resource capacity is weak. NGOs are responsible for close to 80% of health service delivery, which complicates the coordination of service delivery.

Data about the health status of the Nzara zone population are difficult to obtain.

South Sudan has some of the worst health outcome indicators globally, in spite of modest improvements over the last five years. Maternal mortality ratio has stagnated at 2054 per 100 000. Mortality rate for infants and children under five years declined from 102 and 135 in 2006 to 75 and 104 in 2012 per 1000 live births respectively. The significant disparity in health status across socio-demographic factors and geographical location is well documented.

Communicable diseases constitute a major public health problem: Malaria accounts for 30% of outpatientdiagnosis: TB prevalence is at 140 per 100 000: HIV/AIDS prevalence is estimated at 3%, and classified as a generalized epidemic. Most neglected tropical diseases (NTDs) are endemic: South Sudan accounts for about 90% of global guinea-worm disease burden. Other NTDs include visceral, leishmaniasis, trypanosomiasis, onchocerciasis, trachoma, lymphatic filariasis and schistosomiasis. Noncommunicable diseases (NCDs) are on the rise, especially cardiovascular diseases and diabetes among the affluent. Road traffic accidents are significant, while mental disorders are also prevalent, given the vulnerability to post-traumatic stress disorders after the prolonged conflicts in the country. The country is vulnerable to humanitarian crises, primarily as a result of inter-ethnic conflicts and perennial border tensions which increases the risk of epidemic prone diseases especially measles and cholera. South Sudan's Health Sector Development Plan (HSDP) 2012-2016 provides the overall vision and strategic direction for development in the health sector. It is aligned to the South Sudan Development Plan (SSDP), drawing its vision from the social and human development pillar goal of the former, which is "to promote the well-being and dignity of all people of South Sudan, by progressively accelerating universal access to basic services". The overall goal of the HSDP is to "contribute to the reduction of maternal and infant mortality and improve the overall health status, as well as the quality of life of the South Sudanese population".

Health Care facilities in Yambio.

Yambio is the capital of Western Equatoria State. The state has the highest maternal mortality in SouthSudan, which in turn has one of the highest rates of maternal deaths in the world. Cultural practices, traditional beliefs, social and economic constraints continue to hamper access to healthcare. With 152,000 people is a predominately agricultural area with a lot of potential for development. The civil war in the country and the central governement financial problems have increased the tensions between tribes in the area and have truncated the growth prospects of the region.

In Yambio you can find two health facilities:.

<u>Yambio state Hospital</u> was supported by MSF-OCBA in 2014 .It is currently working at the surgical department, maternity and the pediatric department. They are also supplying stationary to the hospital for record keeping.

The maternity section of Yambio Hospital receives every day around 20 to 50 child births and postnatalcases. According to a UNFPA Report, midwives can prevent up to 90 percent of maternal deaths where they are authorized to practice their competencies and play a full role during pregnancy, childbirth and after birth.

Sunset Inn Medical Clinic no data available.

General Information of Yambio:

Accommodation:

Tourist Hotel	Rates unavailable	Contact: Gabriel M.Gbera 249955168755 249918929009	
Sunset Hotel	Rates unavailable	Contact: Kango Smith 249913709097 249955878700	
South Sudan Hotel	Rates unavailable	Contact: William Dau Deng 249903833111 249955342676	
Navisha Hotel	Rates unavailable	Contact: Justin Ali Zawa 249913141791 249955114440	
Super Star Hotel	Rates unavailable	Contact: 249903827066	

MTN, Zain, Vivacell and Sudani for mobile and internet services

Social Amenities:

- Tourist Hotel Restaurant
- Sunset Hotel Restaurant
- South Sudan Hotel Restaurant
- Naivasha Hotel
- Star Hotel Restaurant and
- UNICEF Cafeteria
- There are a number of vegetable/fruit markets and shops open daily.

Transport:

- 2 Small Commercial flights between Yambio, Juba and Entebbe
- A good number of Motorbike Taxis commonly called "Bodaboda", as well as a shuttle Tourist Hotel offers shuttle service to /from Yambio Airstrip.
- UNMISS flights available, schedule and booking procedures only for UN workers.

Key Facilities:

- State Police Station
- Contact: Mr. Kongol Deng, Dep.State Police Commissioner 249906072490

Nzara Hospital:

The hospital is overseen by the Comboni Missionary Sisters. The Sisters are supported by a dedicated team of local doctors and nurses. The comboni Missionary sisters are supported by different NGO's by funding. The hospital is a 24 km by road from Yambio.

Direct beneficiaries: All the population of the Nzara village and Nzara county. Indirect beneficiaries: the realization of the project will allow the community to take critical steps to improve life conditions.

3. PROBLEM ANALYSIS

Like many communities in developing countries, Nzara faces ongoing health challenges, most notably as a result of widespread HIV/AIDS, poor maternal health, malaria, diarrhea, typhoid, and other health problems with root causes based in systemic poverty and gender inequality throughout the area. Key underlying challenges in accessing quality health care for maternal and child health care services include: longdistances on poor roads that are sometimes impassable, and lack of transport to reach the few available health facilities; understaffed/ poorly staffed health facilities; poor health facility infrastructure, equipment, and supplies; and health seeking behavior including lack of knowledge, and gender inequality; and religious beliefs and practices.

Specific challenges include:

1. Lack of education: Only one-third (32.4%) of Nzara women surveyed from peri-urban areas and one-quarter (25.1%) from rural areas completed primary school, and only 5.4% from peri-urban and 4% from rural areas completed secondary school, while 7.2% of women from rural areas received no formal education.

Other key challenges for children to attend school include: lack of transportation; lack of food; lack of clean water at schools. Some areas also do not have readily accessible secondary schools and suffer shortages of teachers. Moreover, many girls leave school after puberty because there is no safe space, much less supplies, to deal with feminine issues such as menstruation. These issues manifest themselves in several key health statistics; for example, women in Nzara County who completed primary school are more likely to deliver their baby at a health facility (61%) than women with no formal education (37%).

2. Severely limited access to maternal and child health (MCH) care services:Women and children are often must travel long distances along unpaved roads in order to reach Nzara Hospital and other health care facilities. There is also a lack of a functioning referral system and emergency vehicles. These issues have had a profound impact on their ability to receive health-related services. For instance:

Antenatal Care (ANC): Half of women surveyed did not receive at least four antenatal controls (visits) during their last pregnancy, which is considered the minimum standard by the WHO.

Delivery: Only 28% of Nzara women surveyed from peri-urban areas and 12% of women from rural areas delivered their last baby at a health facility, which would greatly improve women's chances of getting proper treatment, particularly when there are complications. The majority (63%) of women from rural areas in Nzara County who did not deliver their last baby at a health facility reported that this was due to the nearest health facility being too far away.

Post Natal Care: Half of women surveyed who have delivered did not have a follow up visit in the first 24 hours.

Child Health: Over a third (35%) of surveyed mothers in rural areas have lost a child under the age of two years. Health facility staff interviewed report that complications due to severe malaria is a major cause of death of children under age five, while community members report causes of death of under-fives as diarrhea, edema, typhoid, fever, and malaria.

Out of all the women in Nzara County surveyed, 71% of mothers confirmed upper respiratory infections in their child under five years of age within the past two weeks, while 53.1% reported that their child had fever, and 63.4% reported that their child had diarrhea. Community members report that they often cannot manage to bring their children to a health facility because of lack of transport.

- **3. Need to improve the quality of services for women and children in the formal health system:** Community members and key stakeholders identified multiple factors that deter people from seeking care at local facilities such as Nzara Mission Hospital (MH), PHCCs, or PHCUs.
- 4. Need to empower communities to identify, advocate for and implement programs that improve community health and well-being-

In summary, Nzara is situated in a strategically optimal location to target the most vulnerable part of the population and to address through accessible primary health care and a secondary health care.

4. PROJECT DESCRIPTION.

Nzara Hospital is a general hospital that had 100 beds. 66 of them are paediatrics.

<u>Health Center</u>	General and Child Hospital	
Curative/Preventive	Emergency room	
Laboratory	Men ward	
IEC (Information, Education, Communication)	Maternity/Obstetric Ward	
ART "HIV" Clinic	Pediatric Ward	
TB Clinic	Terapetic Feeding Center Unit	
Malnourished Consultation	TBC Ward	
	IEC (Information, Education,	
	Communication)	
	PMTCT/VTC (Prevention Mothers to Child	
	transmission/Voluntary Testing and	
	Counseling)	

The beneficiary population will be the children and women in the Nzara Zone of Yambio County.

We estimate a population of 50.000 living in this area with the following age and gender distribution: 12500 women (25% of total), 2500 pregnant women (5% of total), 22.000 children under 15 (44% of total). The target population of the Nzara Hospital will be 37.000.

5. SETTING-UP STRATEGY.

<u>Implementation strategy:</u>

• To improve the quality in Nzara hospital:

Through a comprehensive health package and through the construction of a OT, Waste management Area, Laundry and support buildings (Cantine, Staff Room...)

O.T Slhould be constructed to do ceserean section, apendictis, curetage and minor surgery. And as well should be constructed / find the new sterilitation and landry area. A trainning should be held to improve the Knowledge of the staff in sterilitation, general higiene and in universal precautions.

Waste manegement area should be constructed. Actually no waste area has been designed and neither a incinerator type monfort (provisonal incinarator or burner). They just buried the waste in and open area accessible to everybody. That is strong point to reinforce and help.

The idea of the waste area is to prevent the spread of the diseases, to control the vectors and to destroy the waste that the hospital made.

As well training should be held to all the staff in the segregation of the waste in the differents units of the hospital (soft dry /wet waste ,sharps and organic).

At least the waste area should be proper fence and close with door and padlock. As well a built up a waste stock in order to stock the waste cobert (rainning season,......) before to be burn in the pit.

Ruffing the battery cointeiner of the solar planel system in order to reduce the temperature and to avoid corrosion.

It is very important to make a ventilation hole for the generator container. In order to provide air to the engine and to exhaust the heat. As well a logbook for the kubota generator should be implemented and every 2 weeks should be turn on for 1 hour, to check the battery and get it logged.

Water system although they have a good water system (20.000 tank filled with they owne borehole) is still lacking then correct water distribution point (waiting area, toilets.......), drenatge to avoid standing water (vector control...) and chlorineted water.

In all hospital is mandatory to have a water hand point at all toillets. Normally the water points should be chlorineted. Is as well manadatory to chlorineted all the water system.

Some areas don't have proper drinkable water point (waiting area,wards, OPD pharmacies,dressing room....)

As well some of the black plastic tanks don't have a good tap. Some of then are linking and there is a standing water. All taps should be changed and a good drenatge water system implement.

Although the pharmacy is constructed and it seems well organize should be review. There is a lack of the proper procedure pharmacy management storage (cold chain, Air conditioningto buy a fridge and air conditioner to control the temperature in the store) and the supply of the retails pharmacies .Some new documents should be implemented (daily and monthly consumption, order forms bettween the retails pharmacies) As well to work in the suply of the retails pharmacies (IPD/OPD) and organize them. Education package of nurses should be held (treatment charts, drug dosage, handing over procedures, drug calculation.....)

A logistic staff should be train in water and sanitation and general mantinance of the hospital. Higiene and sanitation trainning should be held to the cleaner staff. In order to put in place a correct cleaning of the hospital (using soap and chlorineted water....)

After cleaning with a detergent (cleaning product without an antimicrobial agent) and rinsing with water, apply a 0.1 % active chlorine solution. Preliminary washing and rinsing are essential: the activity of chlorine is reduced in the presence of organic material (sputum, vomit, faeces, blood and other body fluids), and thedetergent used may be incompatible with chlorine. Contact time is 15 minutes. Stainless steel surfaces should be rinsed with water after disinfection with chlorine solution.

The HHRR cost an average of 9.750 USD a month to keep running the Nzara's Hospital. A donor should be find to fill up this part with 4.500 USD a month for the next 2 years.

Good points:

Free electricity (100 Kwh from solar panel+ Batteries), borehole, water system working, big land extension of the Hospital, general well willing of the building and trainning capacities of the administrator and staff. Could be the pediatric referent hospital of the region.

• Networking with other NGO's:

To built up links between them and complement the Nzara Hospital.

• Testimony of sud sudan situation:

6. STADISTICS.

GENERAL MEDICAL REPORT 2016

Nzara Hospital, Sud Sudan	<5 years	>5 years	Total:
OPD admission	7500	7219	14719
IPD admission	2700	727	3427
Blood transfusion	199	26	225
Mortality rate	16*	12	28
TBC IPD (2016)	8	61	69
	New Cases	In treatment	
ART Clinic (JUST 2016)	113**	99	
	<5 years	>5 years	
ART Clinic program	82 (Diagnose) 78 (On ARV's)	1718 (Diagnose) 1522 (On ARV's)	1800 (Diagnose) 1600 (On ARV's)
	severe cute malnutrition	moderate malnutrition	Total treated
Terapeutic Feeding Center	202	171	373***

^{*}Under five **mortality rate** in the pediatric ward has been 0,6%, with severe malaria as the main cause of death; an additional number of children unfortunately died in the first few hours of admission in the ward, some of them even before treatment could be started.

Most of them are stable on treatment; those in need of care for opportunistic infections were treated as Out or In patients according to their conditions.

^{**}There were continuous TB/HIV AIDS linkage activities: patients were tested for HIV (before or after treatment) and 30 of them were found positive and referred to the ARV clinic for further management.

^{***}Nutrition assessment has been done for all admitted children and, from the month of April , also in the outpatient department. The high increment in the number of cases of malnutrition compared to the previous year is also to be related to the situation of social insecurity and war in the Country.

7. RESOURCES.

Material Resources

3 Toyota land cruiser (2 ambulance and 1 Logistic)
Battery Solar panel of 100 Kwh
Generator Kubota 32 Kwh
4 laptop computer (1 laboratory, 1 Admin, 1 HHRR and 1 Hospital manager)
2 Autoclave (21 L, 39 L)
In the laboratory (1 Frigde Blood bank ,3 Microscope,C4 machine,Chemistry machine and HBC machine)

Human Resources

Expatriates

Sr. Laura Giminiagni (Hospital Maneger, Italian) Sr. Jean Francise (Midwife- Chief Nurse, Uganada) Dr. Tabanne (Doctor, Uganda) 2 Clinical officers (Uganda)

National Staff

- 1 Clinical Officer
- 3 Diploma Nurses
- 7 Register Nurse
- 14 Nurses
- 15 Auxiliary nurses
- 7 Job on training
- 10 Cleaners
- 6 Watchman.
- 2 logistician
- 2 driver
- 1 Administrator
- 1 HHRR
- 2 Pharmacy workers

8. BUDGET.

228.000 USD for the running of the Hospital.

9. ANNEX MAPS.

