

1. INTRODUCTION

Adequate nutrition is a universal right and is essential for the physical, mental, and emotional development of children as well as the quality of life of adults.

Adequate nutrition and diet are the primary defenses for maintaining health. Nutrition is essential for the increase in the efficiency of medications such as antiretroviral drugs, and plays a critical role in the primary strategies for the prevention of HIV and the treatment of AIDS.

The national policy on nutrition is part of the framework of the health sector policy, in harmony with the Rwanda Government's policy on global development, as defined in Vision 2020 and in the strategy paper on poverty reduction in Rwanda to develop solid planning and a reference base for all interventions in the nutrition sector.

1. 1. Defining the nutrition sub-sector

Nutrition is a sub-sector of national development under the umbrella organization of the Ministry of Health. It is transversal in character. Nutrition cross-cuts several development sectors with interventions targeting the underlying root causes of malnutrition and/or those confronting malnutrition as a public health problem which has enormous consequences on life, education, agriculture, and economy.

1. 2. Context

(I) National Context

Rwanda is a landlocked mountainous country. Located in the Great Lakes region, it covers a surface area of 26,338 km². According to the 2002 demographic census, Rwanda has a population of 8.162.715 and one of the highest demographic densities in Africa; 310 inhabitants per km². The population growth rate is estimated at 2.9 %. In 2004 the birth rate was at 43%.

- Socio-political context

Rwanda was the scene of a civil war and genocide from 1990 until 1994 which caused the death of 1 million people and the exile of 3 million others into neighboring countries. These 2 events have affected the life of all Rwandans. Since the end of the genocide, the country is committed to a process of national reconciliation for the social cohesion and the reestablishment of social ties between its inhabitants.

Rwanda is currently engaged in a good governance policy. Political and administrative structures are decentralized and encourage the participation of the population. Rwanda has established an important program of economic liberalization. After a transitional period of 9 years, a referendum on the new constitution has been carried out and local, presidential, parliamentary, and senatorial elections took place.

- Socio-economic context

Rwanda is one of the poorest countries in the world with an annual income of \$210 per capita. In 2001, more than 60 % of the population was living below the poverty line. The GNP is around 1.8 billion US dollars. Agriculture is the main source of foreign currency in the country and the main source of revenue for the population. The secondary sector, still at its embryonic stage, is essentially made up of manufacturing industries and construction which contributed to 16.6% of GDP in 2001 (Development Indicators for Rwanda 2003). The tertiary sector contributes 34% to the GDP; it is made up of commercial (77%) and non commercial services (23%).

(ii) Regional and international context

Given the consequences of malnutrition in facing the challenges of development, the World Summit for Children decided in 1990 to set as an objective for the year 2000, the reduction of the rate of malnutrition by one third. This objective was reiterated at the World Assembly for Health (1991), the International Conference for Nutrition (1992), and the World Summit for Nutrition (1996). This objective is an integral part of the Millennium Development Goals, to which Rwanda has subscribed. At the regional level, the African Union, the NEPAD, the SADC and other interstate organizations, have adopted resolutions and recommendations aimed at fighting malnutrition.

Rwanda has adopted the commitment, resolution and recommendations of the above mentioned international summits and institutions aimed at reducing malnutrition and poverty. Rwanda has also adhered to the Convention for the Rights of Children (CRC) and the Convention for the Eradication of all forms of Discrimination Against Women (CEDAW). In various sectors, Rwanda has also adopted a number of national policies and strategies that can have a real impact on the promotion of the nutritional state of the population, namely the Millennium Development Goals, Vision 2020, the PRSP, the National Policy on Health, and the National Policy on Agriculture.

2. GENERAL ORIENTATIONS

2. 1. Vision 2020

Vision 2020 adopted in 2001 for the development of Rwanda; has underlined, in paragraph 102, the high prevalence of malnutrition at the national level and its impact on the country's economy. It underlines the insufficient food intake of the population vis-à-vis its nutritional needs, despite efforts made in the agricultural sector which involves 90% of the active population.

2. 2. Poverty Reduction Strategy

In 2001, more than 60 % of the Rwandan population was living below the poverty line. To face this burden, Rwanda adopted the Poverty Reduction Strategy Paper (PRSP) in order to support the development of the country. Nutrition is essential for the development of human resources indispensable for the reduction of poverty. In fact, the social and economic costs of malnutrition are enormous; high mortality and morbidity rates, loss of potential human resources, reduction in education and working capacity, decreased productivity and increased poverty with intergenerational effects.

Malnutrition thus constitutes a factor of aggravation of poverty and a large barrier to socio-economic development. Indeed, according to preliminary estimates of Profiles/Rwanda 2005 analysis, if there is no intervention to prevent and control the following public health problems over the period 2005 to 2014, the loss of productivity is estimated at 208.683.000 \$US due to stunting (deficit of height compared to the age in children and which is estimated at 43 %), 97.487.000 \$US due to iodine deficiency, 63.486.000 \$US due to iron deficiency in woman in reproductive age and 70.508.000 \$US due to anemia in adults. Moreover, a loss of 137.865.000 \$US could be observed if nothing is done to correct low birth weight in children. 270.290 new born can be saved from cerebral damage related to the iodine deficiency during the same period.

Malnutrition is, in fact, a factor in the aggravation of poverty and slows down socio-economic development. The fulfillment of the millennium development objective aimed at reducing by half the proportion of people living under the poverty level between 1990 and 2015 is also seriously compromised by malnutrition.

2. 3. National Investment Strategy

Given the negative impact of malnutrition on life, education, working capacity, and productivity, the promotion of nutrition is a major investment in sustainable development for the country. According to the preliminary estimation of Profiles/Rwanda 2005, a reduction of 30 % in stunting in children below two years old (from 45.4 % to 29.5 %) will result in a gain of 40,500,000 \$US. Reducing anemia by 35 % in children and women will allow gain respectively 10.723.000 \$US and 14.916.000 \$US by 2014. Similarly losses related to inadequate breastfeeding practices are estimated at 9,088,000 \$US while a gain of 131,000,000 \$US is expected if the above breastfeeding practices are improved.

Investment to improve the population's nutritional status, particularly for children and women, is an efficient way to improve the quality of life of future generations and must be intensified. In fact, according to the preliminary estimations of Profiles/Rwanda 2005, every dollar spent in the control of iodine deficiency yields 114,21 US\$, every dollar spent in the control of Protein-energy malnutrition yields 3.49 US\$, and a dollar invested for the control of anemia yields 24.76 US\$. Therefore, on average, a dollar invested in the nutritional interventions yields 8.26 US\$. Similarly, losses due to breastfeeding malpractices are estimated at 9.088.000 US\$ for the same period whereas good practices of breastfeeding babies between 0-36 months would allow the country to save up to 131.000.000 \$ per year.

Rwanda has adopted a national strategy for the increase of investment capacity as translated in the orientations of Vision 2020. To implement Sector Wide Approach mechanisms recommended by the National Investment Strategy, to reinforce the financial support to grassroots entities for their development, Rwanda has decentralized political and administrative structures adopted in the context of good governance. Community based nutritional activities are given priority to ensure a good and durable nutritional state for the entire population.

Given the magnitude of the problem, several partners are involved in the support of nutritional activities in Rwanda, namely UN agencies, bilateral and multilateral cooperation agencies, NGOs, various religious denominations, developmental associations, etc.

2. 4. Seven-year program for the Government

The Health Sector 2005-2009 Strategic Plan, which is an integral part of the seven year program of the government, has stressed the necessity to have a national nutrition policy to guide and coordinate the multi-sectoral interventions required to effectively fight malnutrition.

The national nutrition policy is a basic guidance tool for the priority strategic orientations in nutrition related matters, to ensure an effective advocacy of the mobilization of human, material and financial resources required to implement the government short-term and long-term programs.

2. 5. International Development Objectives

(i) Millennium Development Goals and Nutrition

Malnutrition has a negative impact on the achievement of the Millennium Development Goals (MDGs), specifically the eradication of poverty and hunger, universal primary education, reduction of child and maternal mortality, HIV/AIDS and Disease control, gender equality and sustainable environment.

Indeed, malnutrition jeopardize survival by increasing child and maternal mortality. It impairs immunity in conjunction with HIV/AIDS increasing vulnerability of infected people. Malnutrition decreases the intellectual quotient (IQ) which affects negatively the strategy of universal education. Malnutrition leads to stunting with a reduction of

physical work capacity. It affects women who are the main labor force in the agricultural setting leading to a productivity decrease.

Malnutrition has a considerable negative impact on the global achievement of the Millennium Development Goals. In fact, malnutrition jeopardizes survival because of increased infant and maternal mortality. Combined with HIV; malnutrition weakens the immune system, making people living with HIV/AIDS even more vulnerable. Malnutrition reduces the intelligence quotient and cognitive capacity, jeopardizing the “education for all” policy. It causes a delay in growth and reduces physical and working capacity. Malnutrition particularly affects women; who are the majority of the workforce in agriculture, resulting in decreased productivity.

Goal1. Eradicate extreme poverty and hunger and end malnutrition and hunger.

Rwanda has committed to halve the proportion of people suffering of hunger between 1990 and 2015. The coverage of the population nutritional needs from the national food production has improved from 1990 to 2002 (63% to 84 %) despite a reduction observed in 2005 (55%) due to the decrease of the rainfall. However, the nutritional status of underfive children did not significantly improved. 60 % of the population live below the poverty line. According to the report on Rwanda Development indicators of 2002, the daily energy consumption per person is 1709 Kcal, while the international recommendations are 2100 kcal. For proteins, the daily consumption is 39 g versus 59 g and that of fat is 6 g versus 40g. Underweight and stunting affects respectively 24% and 43% of children with zonal disparity (26% and 15% in urban and 28% and 48% in rural). Key challenges remain to improve the situation such as reduction of poverty, improvement of national food production, development of a nutrition education programme of essential nutrient rich food and improvement of women’s education level.

For more than 80% of the country, workers are from the agricultural and manual sectors. These groups are key actors in country development. However, it has been proven that a decrease of 1% in hemoglobin leads to a decrease of 1.5% in productivity and the mean reduction of the population productivity is 11% (Basta, 1979; Levin 1993). Anemia, a nutritional disease caused by iron deficiency in most case is common in Rwandan women and children (43%). This contributes not only to an important loss of women’s and children’s lives, but also a loss of productivity and weakens the national economy. According to Profiles 2005, over the period of 2005 to 2014, the loss of productivity is estimated at 208.683.000 \$US due to stunting (deficit of height compared to the age in children and which is estimated at 43 %), 97.487.000 \$US due to iodine deficiency, 63.486.000 \$US due to iron deficiency in woman in reproductive age and 70.508.000 \$US due to anemia in adults. Investing in nutrition will allow an acceleration in country development.

More than 80% of the workforce is in the agricultural and manual sector. They play key roles in the development effort of the country. However, it has been proven that a decrease of 1% in hemoglobine level leads to a decrease of 1.5% in productivity and the average reduction of productivity in an anemic population is 11% (Bastia, 1979; Levin 1993). Anemia, a nutritional disease caused by iron deficiency in general is common in Rwandan women and is among the leading causes of maternal death in hospitals. That contributes to an important loss not only of women’s lives but also of

productivity at the national level. Investing in nutrition, in particular in nutrition of women and girls can help accelerate the development of the country.

Other challenges remain to be overcome such as the reduction of poverty for an improved nutrition and health status of the population, improved national food production, a programme of nutrition education for behavior change and the consumption of essential micronutrient rich local foods, and improved women literacy level.

Goal 2. Achievement of universal primary education

Education is one element of the poverty reduction strategy. Rwanda is a country with a high literacy rate amongst its youth between 15 and 24 years old (84 %) (Education Strategic Plan) in Sub Sahara Africa. The net primary enrollment rate of both girls and boys has improved in the country during the last years with no significant sex difference (respectively 78,9% and 77,7% in 2003, MINEDUC). To ensure and maintain a quality education (reduction of drop out, repetition etc.) a child needs adequate nutrition and a sufficient and balanced diet to avoid hunger, iodine and iron deficiencies, source of irreversible development delays, yet preventable. In an iodine deficiency endemic area, the IQ is decreased irreversibly by 13,5 points in general. Of 100 infants born to iodine deficient mothers, 3 become cretins (100 % irreversible intellectual loss), 10% will suffer from severe mental retardation (25% irreversible intellectual loss) and 87% will be born with moderate mental retardation (5% irreversible intellectual loss). Iodine deficiency affects 26% of school children in Rwanda. There is an urgent need to focus on nutrition as one of the strategies to achieve this MDG.

Goal 4. Reduction of child mortality

Infant and child deaths do not allow the development of the necessary human potential for sustainable development. Child mortality remains an important problem in Rwanda despite tremendous efforts conducted by the GOR during past years. Indeed, according to DHSR 2000, the infant mortality rate (0-11 months) and child mortality (0-5 years) remains high with respectively 107 ‰ and 196 ‰. This high mortality rate has many causes amongst which malnutrition plays a key role in addition to malaria, HIV/AIDS, acute respiratory infection, diarrhea etc.

In fact according to WHO (1995), 56% of child mortality in developing countries is related to malnutrition (Protein-energy malnutrition, iron, vitamin A, zinc deficiencies etc..). It has been proven that vitamin A deficiency alone contributes alone 25% of child mortalities. There is a correlation between malnutrition and the other childhood illnesses, one aggravates the other and vice versa.

The epidemiologic situation of the children less than 0-5 years is dominated by the infantile diseases mentioned above. Protein-energy malnutrition (43%), vitamin A deficiency (25% of the children between 6 and 11 months) and iron deficiency (43%) are supported by other factors such as inappropriate practices of complementary feeding.

To achieve the goal of child mortality reduction there is a need to not only to tackle other childhood illnesses, but also child malnutrition, including nutritional support for HIV/AIDS affected and infected children.

According to estimates of Profiles/Rwanda 2005 for the period from 2005 to 2014, if nothing is done, protéino-energety malnutrition will be associated with the death of 188.486 children from 0 to 5 years, while the interventions in the field of the nutrition would make it possible to save 49.972 children of the same age group. According to the same source, the total rate of child mortality associated with proteino-energy malnutrition is 43,4; 61,6 % of whom are associated with mild forms of malnutrition, 30,4% with moderate forms and 8% with severe malnutrition. Moreover, vitamin A deficiency will contribute to the death of 15.702 children aged 0 to 5 years if no intervention is carried out ot prevent vitamin A deficiency. For the same period, 8.240 children in this same age group could be saved.

Goal 5. Reduce Maternal mortality

Hemorrhages constitute one of the principal causes of maternal mortality and contribute to 25% of maternal deaths (Statistical of Moh HIS 2003). In general these hemorrhages occur when health state is weakened by anaemia and parasitic infections such as malaria, and HIV/AIDS. However, it is proven that hemorrhages are caused by several other factors among which iron deficiency is one. Dystocies during labor among women are also related to malnutrition of the mother, especially protein-energy malnutrition, which first occurred at an early age.

Proteino-energy malnutrition does not affect only children in Rwanda. According to DHS 2000, 9% of women from 15 to 49 years presented signs of malnutrition with a body mass index < 18,5 (9,4%- rural, 6,7%-urban). Anemia is also frequent amongst pregnant and reproductive age women due to the high prevalence of malaria and intestinal parasitic infections and due a diet based on cereals and tubers, low in iron or of iron with limited absorption. Moreover, iron supplementation during antennal care visits covers only 22% of pregnant women. The observance of this chimioprophylactic intervention needs to be considered, taking into account the side effects of iron. From the preliminary results' of Profiles/Rwanda 2005, a current prévalence of 7% of night blindness in pregnant woment, 6,544 women could die of consequences related to vitamin A deficiency without appropriate interventions between 2005 and 2014.

Achivement of this objective is related on one hand to the improvement of the quality of services including access, but also to the improvement of the mother's nutritional status. Any improvement of women's nutrition will have a positive impact on this objective.

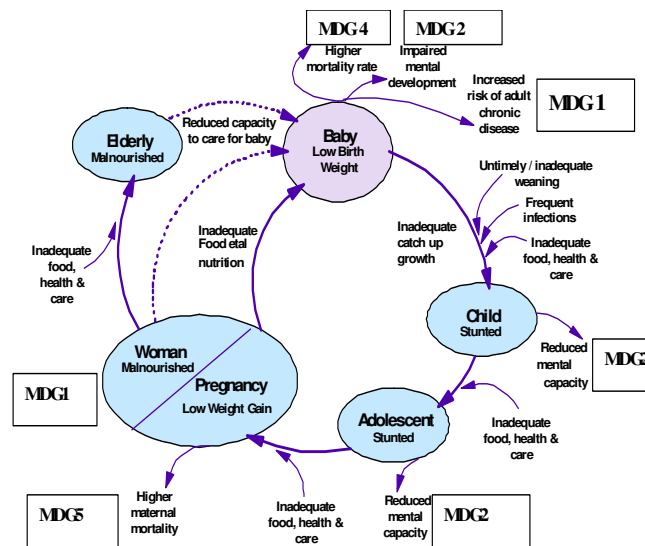
Goal 6. Combat HIV/AIDS, Malaria and Others Diseases

The HIV/AIDS pandemic affects primarily youth and women who constitute the active force for country development. The direct implication of this situation is household food insecurity. Indeed, inadequate food accessibility is one of the signs of distress in HIV/AIDS affected and infected families.

Like all infectious disease, there is a relationship between malnutrition and HIV/AIDS. It is recognized that undernutrition is a factor of deterioration of the immune system, vulnerability, and susceptibility to infection. Malnutrition has similar effects on people suffering from paludism. Approximately 57% of the deaths due to paludism occur on a malnutrition background. A good nutrition is of paramount importance, especially in disease management, longevity of infected people, the delay in the progression of the disease towards AIDS and the mitigation of the disease consequences on individuals and families. Nutrition can also increase a reduction in antiretroviral drugs efficacy or reduce drugs side effects in patients.

In Rwanda, HIV prevalence is 8% (TRAC, 2003). Surmountable efforts have been carried out by the Government and its partners in the control of the pandemic. However the nutrition component of the HIV programme (PMTCT, Pediatric care, youth) needs to be reinforced to ensure reduction of the financial burden related to HIV/AIDS disease, ART, and for better participation of those people in country sustainable development activities.

**Life cycle Approach – Link of Nutrition and MDGs
(adapted UNACC/SCN 1997)**



Scheme showing the relationship between malnutrition and specific MDGs

(ii) New Economic Partnership for Africa Development.

The New Economic Partnership for Africa Development (NEPAD), which Rwanda adhered to, has identified six strategic axes for the development of population's health in the member states.

The strategic axes are:

- Re-enforcement of the government's role in the mobilization of efforts and resources for the development of health
- Re-enforcement of health services to provide efficient and equitable health care,
- Promotion of prevention programs of transmissible diseases with particular attention on the fight against HIV, tuberculosis, malaria, diarrhea, acute respiratory infection and malnutrition
- Re-enforcement of community-based communication activities
- Mobilization of durable and sufficient resources to support healthcare and disease prevention systems to achieve Health Sector objectives.

The implementation of the national policy on nutrition requires an efficient partnership between the Government, private sector, multilateral cooperation, NGOs, and communities to mobilize the resources for multi-sectoral activities aimed at fighting malnutrition.

3. PRESENTATION OF THE NUTRITION SUB-SECTOR

3.1. Statement and trends of the problem

The nutritional situation in Rwanda remains alarming, given the fact that there have been several forms of malnutrition for too many years.

(i) The extent of malnutrition in Rwanda

The nutritional situation in Rwanda remains alarming according to the extent of different forms of malnutrition for several years in the country.

According to the Rwandan Demographic and Health Survey (DHSR), chronic malnutrition or stunting, which results in delayed growth, affected 43% of children between 0 and 5 years in 2000. This prevalence affects all age groups with an increase from age 6 months to 59 months (10% between 0-6 months, 20 between 6-9 months and 54,3% between age 4 to 5 years). The rural area is more affected than the urban setting with respectively 48% and 28%. Provincial differences are also observed: Gikongoro with 50%, Kibuye, Butare with 48% and Byumba with 47%. Kigali, the capital city has a prevalence of 28%. There is no sex difference.

Underweight affects 24% of underfive children (low weight compared to age). Acute protein energy malnutrition (low weight compared to height) which is associated with high death rates affects 9% of children in the same age group, three times higher than a normal population of the same age group. These are pre-school children who, being physically and intellectually weakened, will go on to face primary education. 24% of children between 0 and 5 years were underweight. Acute malnutrition, associated with a high rate of death, affected 9% of children, i.e. 3 times more than in a population in good health in the same age bracket.

Malnutrition does not only affect children, but, women as well. According to DHSR, 9% of women between 15 and 49 years old were malnourished (BMI < 18.5) in 2000, particularly in rural areas: 9.4% as opposed to 6.7% in urban areas.

According to estimates from Profiles/Rwanda 2005 over a 10 year period, if no action is taken, protein energy malnutrition will be associated with the death of 188,486 children between the age of 0 and 5 years. Conversely interventions in the nutrition domain would make it possible to save 49,972 children between 0 and 5 years. According to Profiles/Rwanda 2005, the global rate of mortality associated with protein energy malnutrition is 43.4% for children between 0 and 5 years; amongst the death of children attributed to protein energy malnutrition; 61.6% are associated with mild cases, 30.4% with moderate cases and 8% with severe cases.

This alarming situation is partly due to cyclical food crisis and chronic food deficiencies at the household level. The required response is both an efficient emergency response system and long term actions to improve nutrition.

The 2003 annual report of the Ministry of Health ranked acute malnutrition amongst the first 10 causes of morbidity for children between 0 and 59 months old in health centers, 4th cause of mortality for children between 0 and 1 year old, and 2nd cause of

mortality for children between 1 and 14 years old in hospitals. Cases of malnutrition reported by hospitals are those associated with severe and visible manifestations (kwashiorkor, marasmus, mixed forms of malnutrition), which are the extreme cases (Summit of Iceberg). While the most dangerous forms of malnutrition (moderate and light forms) contributing to more than 60% of childhood deaths (according to Profiles 2005) remain unreported.

Anemia, which is the main symptom of lack of iron, is an important cause of maternal mortality, of underweight newborn babies, of reduced focus and school performance for children. Anemia is widespread in Rwandan hospitals and affects 43.1 % of children between 0 and 5 years according to the national survey on nutrition carried out in 1996 by the Ministry of Health. It is also common in pregnant and reproductive age women due to the high prevalence of malaria, parasitic infections, and mainly due to the fact that diet is based on cereals and tubers poor source of absorbable iron. In addition, according to DHSR 2000, iron supplementation in pregnant women is limited, only 22 % of pregnant women get iron tablet during antenatal visits. Adherence might need to be considered due to the side effect of iron tablet.

Vitamin A apart from its role in prevention and treatment of night blindness reinforces resistance to infections resulting in child mortality reduction. In addition, it reduces infectious disease severity (diarrhoea, measles, dysentery and malaria). Consequently vitamin A improves child survival. While an infant-juvenile mortality rate higher than 70% is considered an indicator of vitamin A deficiency, in Rwanda, the mortality rate for children between 0 and 5 years old is 203 %, according to the 2005 UNICEF annual report. The 1996 national survey on nutrition reported a prevalence rate of 25% and 21% of sub-clinical deficiency in Vitamin A (serum retinol < 20 µg/dl), respectively for children under 6 months and for children between 6 and 12 months. This is an indicator of inadequate feeding practices in early childhood. Moreover, according to the DHSR, 7% of pregnant women in 2000 were suffering from nocturnal blindness, indicating a deficiency in vitamin A in the population.

According to estimates from Profiles/Rwanda 2005 over a period of 10 years; if no action is taken, deficiency in vitamin A will cause the death of 15,702 children between 0 and 5 years, whereas adequate action could save 8,240 children in the same age group. In the same way, 6,544 women could die of vitamin A deficiency consequences if nothing is done to prevent it by 2014, while 2,883 lives of women could be saved with vitamin A interventions during the same period.

Iodine deficiency disorders (IDD) affect physical and mental development. In 1990, amongst school children between the age groups of 10 to 20 years, the rate of severe iodine deficiency, through a high prevalence of goiter, was at 49.6%. In 1992, Rwanda adopted the universal salt iodization strategy, which considerably reduced the prevalence of IDD, as indicated by the national surveillance survey, carried out in 1996, which showed a 25.9 % prevalence rate of goiter for children between 5 and 19 years. This survey also indicated that the average value of urinary iodine (298 µg/l) in Rwanda was higher than normal values that range between 100 and 200 µg/l, this could potentially cause within 5 to 10 years a risk of hyperthyroid in vulnerable groups.

Other nutritional deficiencies (such as zinc, selenium, vitamin B1...); that could tell the extent of those deficiencies in public health in Rwanda; have not yet been studied through an epidemiologic study on a large scale. However deficiency in zinc is a current concern given its importance in the context of diarrhea in general and HIV/AIDS induced diarrhea in particular.

Rwandan population is also affected by excess weight. According to the DHSR, 12.5 % of women between 15 and 49 years old were overweight (BMI > 25) in 2000, in urban area (24.5 %) more than in rural areas (9.9 %). Being overweight can lead to obesity which is a high risk factor in diseases such as diabetes, gout, and cardiovascular diseases, etc.

(ii) Trends of malnutrition

For the last two decades, protein-energy malnutrition and micronutrient deficiencies remain a public health problem in Rwanda, contribution to the high infant, child and maternal mortality. Although, underweight went from 29 % in 1992 to 24 % in 2000, stunting has remained stable from 1992 to 2000 (42% and 43 %). This situation is sign of difficult socio-economic conditions of the populations during the last two decades, mainly related to the consequences of 1994 war.

3.2. Causes of malnutrition

The malnutrition causes are located at different level.

(i) Immediate causes of malnutrition

Malnutrition is directly linked to the insufficient food intake and to the high prevalence of infectious and opportunistic diseases.

a) Insufficient food intake

In fact, according to the Ministry of Agriculture (Paper on National Agricultural Policy, 2004), the satisfaction of nutritional needs in Rwanda is largely deficient in relation to the inadequation of food ration, mainly based on cereals, tubers and limited protein sources. Compared to the daily nutritional requirements (2100 kcal, 59 g of proteins and 40 g of fat), the coverage of the daily nutritional requirements in 2001 was at 83 % for energy, 73 % for proteins and 17.5 % for fat. Animal products, with high bio availability, are only providing 3 % of the energy food intake, 7 % of the proteins intake and 38 % of the fat intake, resulting in a considerable deficiency in essential amino acids and indispensable fatty acids.

b) High prevalence of infectious and parasitic diseases

According to the 2003 annual report of the Ministry of Health, malaria, respiratory diseases, diarrhoea and parasitic diseases represent 80% of medical visit causes. Infectious diseases, in particular, diarrheic diseases and HIV/AIDS, reduce absorption and use of nutrients and speed up malnutrition. In 2004, prevalence of

Diarrhoea are one of the main causes of child morbidity and mortality in Rwanda. The national prevalence is 16.9 % with Gokongoro Province having the highest prevalence of 28.5 % (EDSR 2000). Care and treatment at home with oral réhydratation therapy or locally available fluid can avoid the death of thousand of children with diarrhoea. Unfortunately in Rwanda these cases are not taken care of by families. Only 13 % of children have been treated in a health facilities and only 17 5 of them received more fluid and foods during the disease. Almost half of them did not receive any treatment (42 %).

The prevalence of fever is 29 % in underfive children. Among the 47 % seeking for care, only 13 % went to health facilities. More than an half did not receive treatment (53 %). Only 7 % of households have mousquito nets and 68 % of those children sleep under nets. For acute respiratory infection (ARI), only 15 % of the 21 % affected children receive treatment.

HIV/AIDS infection in Rwanda was estimated at 8.9 % in the population aged between 15 and 49 years, according to TRAC (2004). It is about 5,2 % in pregnant women (report from the sentinelle sites , TRAc 2003). HIV/AIDS also affects children; according to 2001 TRAC estimates, every year 40.000 children are born to HIV positive mothers in Rwanda; and according to the UNAIDS report, 22, 000 children in Rwanda had AIDS in 2003. Only 700 children are under antiretroviral therapy (TRAC 2005).

(ii) Underlying causes of malnutrition

a) Households`food insecurity

The main underlying cause of malnutrition is food insecurity in households. According to the ministry of Agriculture (Document on national agricultural policy, 2004), Rwandan population is vulnerable to hunger. In fact, 7% of households only have one meal a day and only 3 % have 3 meals a day. The access to food is limited by the low household income: 210 US \$ per person per year, according to the report on the indicators on Rwanda's development, 2003.

- Food availability

They are not sufficient to ensure household food security. They varie according to the production zone. Zones of of low food production with unfertile soil or affected by climatic variation due to weather changes (weak rainfall) such as Bugesera, Gikongoro are permanent food insecurity and malnutrition pockets in the country. However in other potential high food production zone, malnutrition exists probably because of the consumption of unbalanced diet or the fact that foods are mainly sent for sell (Ruhengeri and Gisenyi). Food availability is also affected by the lack of an adapted food stock strategy by households.

- Food accessibility

It is limited by the household low income (210 \$UD per year per person). In 2000, according to the integrated survey on household living conditions (ISLC), 60 % of the

adult population in Rwanda live below poverty line (< 1 US \$ a day), and 42 % of the population live in extreme poverty.

- Inadequate national food distribution or repartition

The regularity of food supply is not guaranteed to all households all year around, in the sense that population live on a subsistence agriculture, with a low yield the distribution of food is limited by an appropriate organization of foods marketing chains.

- Inadequate household food distribution or repartition

Household food security is also related to the intrahousehold food repartition. In general, vulnerable groups are the most left out in the household food distribution. Children between 6 and 24 months old for those breastmilk is not sufficient to cover all their nutritional needs are receiving only porridge of maize or sorghum. In Rwanda, there few data on household food repartition. However from the focus group discussions in the visited communities during the situation analysis, it was often mentioned that men are receiving the good part of the meal (meat, fish, and chicken), meaning that women and children do not receive these rich foods as needed.

- b) Inappropriate care for children and women

- Inadequate feeding practices

Malnutrition also spreads because of nutrition malpractices. In Rwanda, breastfeeding is a general practice amongst mothers. Despite that the demographic and health Survey of 2000 reported that more than 60 % of mothers exclusively breastfed up to 6 months, exclusive breastfeeding until 6 months of age is lower in practice. , According to the KAP study in 2002, only 17.4 % of mothers are exclusively breastfeeding their children up to 6 months without adding any other food or fluid including water from birth until 6 months. Many mothers give water to their new born after birth or other liquids or foods such as cow's milk, traditional tisanes, fruit juice or local beer before the age of 6 months. According to the same CAP survey, introduction of complementary foods starts between 4 and 12 months and is constituted by a portion of the family meal for 85 % of the cases, indicating dietary malpractices for the young child. Little oil and animal proteins are given to the children. Meat is consumed by only 29 % of children, and cow's milk by only 12 % as complementary food.

The CAP Survey 2002 also revealed that there is no specific diet for pregnant and breastfeeding women. Similarly, existing nutritional support for other vulnerable groups (children between 0 and 5 years old, elderly people, orphans...) is insufficient; except in emergency situations.

- Inadequate healthcare

Inadequate healthcare is also a factor that increases malnutrition. Generally nutritional preventive activities have a very low coverage, as shown by iron and folic acid prophylaxis amongst pregnant and breastfeeding women whose coverage is

22% according to DHS in 2000. Growth monitoring amongst children is not systematic in the FOSA, especially after the last vaccination at 9 months. According to the Survey on provision of healthcare services in 2001, only 10% of FOSA carried out growth monitoring activities on the day of the survey. The basic procedures for a sick child examination are not followed (is the child vomiting, convulsing ...). Only 3 % of children have a danger sign verified, in one out of 3 cases a child capacity to drink or suck has been evaluated,, only one out two children vomiting or drinking including breastmilk has been evaluated).

Nutrition is part of the minimum package of the FOSA. However, nutrition activities are not well developed. Indeed, one of the common nutrition activities at FOSA is the growth monitoring of children from birth to age 5 years old. This activity strongly related to immunization become unsystematic when the vaccination programme of the child is over, around age of 9 months. The child comes to the the FOSA only when he is isick. And when the weight is measured, it used for medicine doses, but not for growth monitoring. Community based growth monitoring is not scaled up to the entire country.

At the same time, nutrition is not minotred as relevant indicators do not exist in the health information system. Health providers are not qualified in nutrition or there are no nutritionists in the country. Only 10 % of visited health facilities performed growth monitoring (Survey on provision of healthcare services in 2001), while 90 % and 74 % respectively had baby scales and children scales. The quality of nutrition services is insufficient due to the lack of qualified human resources and IEC materials.

Due to limited financial resources, people have limited access to healthcare and the use of available services is very low. According to DHSR, in 2000, 76 % of women did not have access to healthcare for financial reasons, and 73 % of women gave birth at home. Inadequate healthcare is also linked to lack of healthcare professionals: 1 doctor for 40,000 inhabitants and 1 nurse for 4,070 inhabitants in 2000. Furthermore, the personnel in health centers are not regularly trained to improve their performances, especially in nutrition related matters. Nutrition activities are generally assigned to social workers without qualifications.

c) Inadequate access to clean water and hygienic facilities

The Rwandan population has little access to potable water. 13% of the population use water that comes straight from the rivers. The population usually drinks non-boiled water and basic hygiene (the washing of hands, after using the toilets, before and after a meal), is generally neglected. In the marketplace, food is often sold in its raw form, spread on the ground, and exposed to dust and other microbes. Few products are sold as processed and packaged goods, particularly in rural areas. Insufficient drainage systems aggravate sanitation problems and favor mosquitoes spread and other infectious and opportunistic diseases that hasten malnutrition.

According to MICS 2001, only 1 % of households have flushing toilets, 8,9% in urban and 0,5% in rural setting. 1,3% have improved latrines (7,6% urban versus 0,9% rural), 71,1% of households have traditional latrines. (75,5% urban versus 70,8% rural), while 3,3% of households do not have any human waste management (1,3%% urban versus 3,4% rural).

According to the IMCI KAP (MoH, 2004), few households (28,0%) have an appropriate latrine and they are used by children in 57,9% of cases. Only 14,6% of respondents wash their hand with soap and water after using toilet, 53,6% wash only with water and 31.1 % do not use either water nor soap. Only 15,9% wash their hands with soap and water before eating and 77 % wash their hands with water only.

According to DHSR 2000, the indicators for Reproductive Health are alarming in Rwanda: Maternal mortality is at 1100 deaths for 100.000 live births (according to the Situation of children in the world, 2005), 7% rate of contraception use, A synthetic fecundity index of 6, an average of birth spacing of 2 years, etc. The high size of the average household (8 people) is one of the factors for food insecurity and malnutrition. Hemorrhages constitute one of the main causes for maternal mortality, especially for women who have had prior diagnosis for anemia.

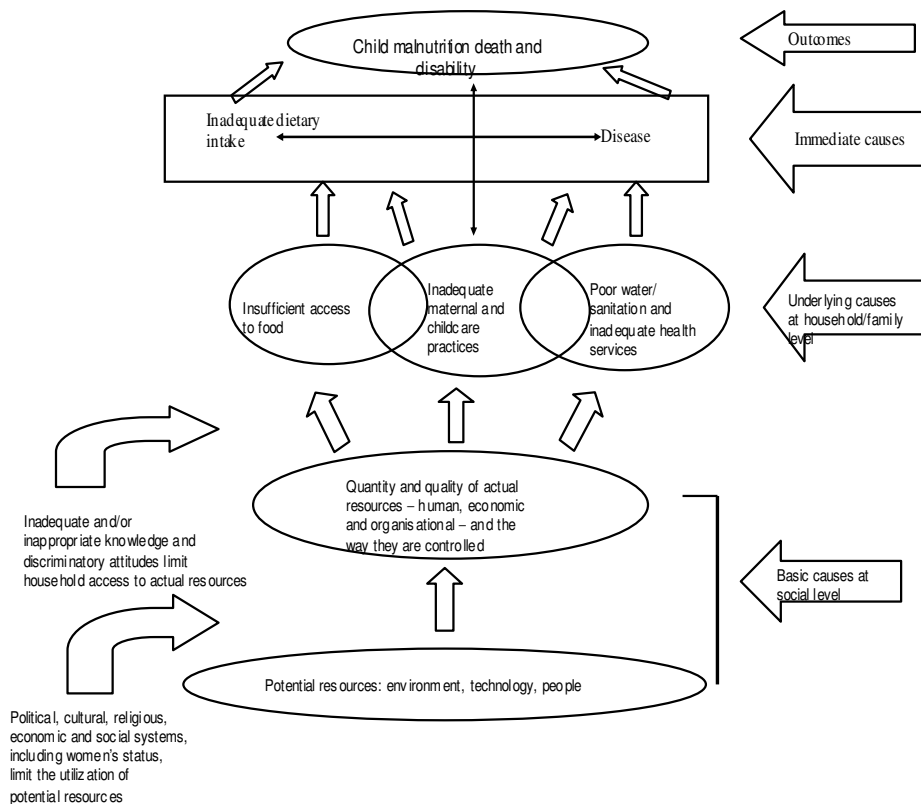
(iii) Root causes

The root causes for malnutrition are the economic imbalances and weaknesses, inadequate institutional support, climate changes, lack of arable land and the low literacy rate in the population.

The Rwandan economy has some structural imbalances, mainly resulting from the 1994 tragic events, also caused by poor natural resources and the fact that it is landlocked. Rwanda has agriculture and farm-based economy with a production that is not only low but directly dependent on climatic fluctuations and over-exploitation of land lacking in nutrients replacement. Areas with little rains situated in the eastern savannas, with seasonal exposure to dry weather, are often the areas suffering from malnutrition.

In 2000, the Government budget allocated to nutrition was very low. It was 2% of the Health budget which in turn, only represented 0.5% of GDP. According to the World Report 2004, the per capita health expenses in Rwanda in 2001 amounted to 11 US\$ by the individual and 24 US\$ by the government. The human and material resources allocated to nutrition are insufficient.

In Rwanda, adult literacy is low, especially for women. In fact, according to DHSR, more than a third of the women (34.9 %), and in 2000 more than a quarter of men (27.5 %), declared they had no education. The same survey has shown that the proportion of children showing a delay in growth is 48% from mothers with no instruction, 42% from mothers who have a primary level education and 26% from mothers with a secondary or higher education level. The low education level of mothers hinders the quality of healthcare provided to children and other household members.



3. 3. Current Status of nutrition services and support structures

Growth monitoring combined to immunization in the FOSA is realized by weighing at up to the age of 1 year. A national protocol for care and treatment of acute severe protein energy has been elaborated in 2001 counseling in infant and young children feeding is conducted in health centers by health personnel during antenatal care. Vitamin A supplementation integration in routine EPI activities has some steps undertaken.

With input from some partners (Unicef, USAID, IRC, CONCERN, NUTRIPA...), some successful experiences of community based nutrition programme (CBNP) are ongoing in some districts (14 sur 40), as well as some pilot projects of early childhood development, parenting education (CECOME), and support to women associations.

Vitamin A supplementation is done during mass campaign twice a year for children and post partum women based on appropriate guidelines and leading to high coverage in children (> 90%) and post partum women. A national legislation on iodized salt exist although outdated. Une réglementation nationale interdisant l'importation du sel non iodé exists. 92% of households consume iodized salt. F Some food fortification projects are ongoing. DUHAMIC fortifies weaning food in

vitamins and minerals (A, B1, B2, PP, B12, C, iron , Calcium, Zinc) to meet the needs of vulnerable people.

In the field of HIV/AIDS, some key documents have been elaborated by the MoH for the integration of nutrition in the HIV /AIDS control programme (infant and young children feeding strategy and guidelines, National norms and standards for VCT and PMTCT, national guidelines for nutritional support and care for PLWA, minimum food package for PLWA.

However, there are some gaps in different domains.

- Inadequate coordination and implementation of nutrition related activities

The national coordination for nutrition is under the responsibility of the Ministry of Health, in the Health Promotion unit. Coordination of nutrition is jeopardized by a lack of qualified nutrition professionals and insufficient resources, which obviously affect implementation and follow up of nutritional activities.

The follow up of nutrition related activities is not based on appropriate indicators in the National Health Information System (HIS). The coordination mechanisms, particularly the framework of continuous dialogue with nutrition partners, are not well developed, except for the technical group which has just been formed and is focusing its attention on HIV/AIDS.

Today, Rwanda lacks nutritionists for the coordination and the implementation of nutritional activities at all levels. In fact, following the inadequate use of their services in the Health sector, many nutritionists were de-motivated and turned away from their profession to better rewarding careers. In several health centers, nutritional activities are currently carried out by social workers with no specific training.

- Interruption of nutritionists' training

Since 1994, Rwanda suspended the nutrition class in vocational schools because nutrition was not classified as a priority area during that time. The number of nutritionists in the field is very low, despite the magnitude of nutritional problems which affect all districts.

Moreover, most of the people involved in nutrition related activities on the field are not qualified. Absence of an adequate nutrition curriculum to incorporate nutrition in schools and on-the-job training has been noted.

- Insufficient coverage of nutritional activities

The community- based nutrition program (CBNP), as well as pilot projects for the education of young children, parental education (Fosacom, Cecom...) and the education of women's associations, have been implemented on a reduced scale country wide. Useful lessons have been learnt from these experiences and an Implementation Guide has been written on the extension of the community-based nutrition.

The Initiative of Baby Friendly Hospitals (IBFH) has not yet been implemented. *The follow-up of children's growth* is carried out through regular weighing at the Health Centres, generally until the age of 9 months. After that age, with the end of the vaccination calendar for children, mothers often stop the regular health visits for post-natal services including weighing the children.

The follow up for weight gain for pregnant and breastfeeding women is not carried out in health centres.

Supplements in vitamin A are provided in health districts in Rwanda, for the benefit of target population, based on a national strategy that is not yet adopted. Information campaigns are regularly organized to this effect, with a high level of coverage. However, the integration of this activity in routine health services activities is still very weak (13.9 % in 2000 for women who breastfeed received vitamin A through routine activities in 2000), and its implementation is vertical. This will create obstacles for continuity. Iron supplementation is not systematic during pregnant women antenatal visits as prophylactic intervention. Iron tablets are usually prescribed for anemia treatment. Stock out are common in health facilities. There is no national strategy on iron deficiency control. Supplements in Iron and Folic acid for pregnant or breastfeeding women is not systematic; these products are generally prescribed after diagnosis to treat anemia. The national strategy to fight iron deficiency is yet to be developed.

The enrichment of food in nutrients is not widely practiced in Rwanda. Only iodine fortified salt is commonly used, as a result of the adoption in 1992 of a national regulation forbidding the importation of non iodized salt. However, the recommended rate of iodization is still at 100 ppm of iodine when the current norms recommend 20 to 40 ppm. In addition to iodized salt, some private initiatives (DUHAMIC...), have initiated the enrichment of flour in vitamins (A, B1, B2, PP, B12, C...) and in minerals (Iron, Calcium, Zinc), following recommendation from partners (WFP, CIAT...) in order to comply with standards and satisfy the needs in supplements for vulnerable groups. The mixed cereals and starch flour (maize, sorghum, soy...) are available on the market (SOSOMA...); however, due to low purchasing power the population's access to these products is currently very limited.

Prevention of overweight related diseases is almost inexistent. An analysis of the current situation has shown that a good proportion of the population is overweight, which is a considerable factor for obesity and excess related diseases, particularly in urban areas.

The promotion of diets and adequate dietary practices and healthy habits to avoid dietary excesses, alcohol abuse, use of tobacco and other drugs is not yet included in health or nutrition services. On the other hand, diabetes, hypertension, heart diseases, renal diseases and other excess related diseases are frequently encountered in hospitals in Rwanda; and no nutritional supervision is given.

The level of treatment of malnutrition cases in peripheral areas is very limited: in 2000, only 4 % of severe malnutrition and 22 % of moderate malnutrition cases were treated by health professionals.

The activities for school nutrition have limited coverage on the national level. We currently have nutrition activities initiated by partners in kinder gardens and canteens. A support project for primary education, especially for young girls, started its pilot phase since September 2001 in regions with high levels of food insecurity. The active phase of this project is from January 2004 to December 2006. It distributes daily meals in 200 schools for 179.183 children and monthly food rations to bring home to 28.000 teenage girls in P4, P5 and P6.

- Lack of norms and insufficient guidelines for treatment of cases.

In nutritional services in some hospitals, children who suffer from acute or severe malnutrition are hospitalized for their nutritional rehabilitation by therapeutic milk, enriched food without adequate protocol. Nutritional advice for newborn babies, young children and mothers are given by healthcare personnel during prenatal visits without clear instructions and appropriate guidance.

- The nutritional component is not fully integrated in the fight against HIV/AIDS

Currently, a nutritional counseling, without adequate content and instruction guide, is often provided by personnel responsible for HIV/AIDS testing activities and other related services. HIV/AIDS patients who are being treated by ARV feel the need for adequate nutrition to support their medical treatment. With regard to nutrition, the pediatric forms of HIV/AIDS, spread out throughout the health system, are not adequately supervised.

Documents were prepared to incorporate the nutritional component in the fight against HIV/AIDS, namely the Strategic Framework for nutrition of the newborn and the young child in the context of HIV/AIDS in Rwanda, the national norms and guidelines for counseling, Voluntary testing and Prevention of the mother-to-child HIV transmission, and the Guide for food and nutritional support of the PLA, etc... However those documents have not yet been adopted.

3. 4. Constraints and potential of the Nutrition Sub-sector

(i) Constraints

The analysis of the nutritional situation has shown that this sub-sector faces the following constraints:

- the nutrition sector does not receive the financial and political support it deserves, despite the impact its interventions can have on sustainable development
- The unfavorable macro-economic situation, which results in insufficient institutional support to nutrition activities in various sectors,
- The unstable geo-climatic environment, with pockets of famine in areas seasonally exposed to dryness,

- The low level of literacy and education, in particular for mothers, which reduces the quality of healthcare provided to children and to the family,
- HIV/AIDS and the high prevalence of infectious and opportunistic diseases, which result in greater needs, lower appetite and lower absorption of nutrients and hasten malnutrition.

An effort must be made to minimize the impact of these constraints in the development of nutrition related activities.

(ii) Potential

The environment of the Nutrition sub-sector has a lot of potential that can be exploited for its development:

- Adherence of the Government to the Millennium Development Goals, the objectives of NEPAD and those of other international summits aimed at improving the nutritional state of the population in particular and of the living conditions in general,
- Existing policies both general and sectoral and national strategies and guidelines in different domains related to nutrition,
- The implementation of the health development strategy based on decentralized management and on district level healthcare, allowing the integration of essential nutrition related activities throughout the country,
- There are partners and donors, such as cooperation agencies, NGOs, private initiatives (Global Alliance for Improving Nutrition or GAIN, Global Fund for the fight against HIV/AIDS, Global Alliance for Vaccination and Immunization or GAVI, the Presidential Emergency Plan for Aids Relief or PEPFAR), etc. that support nutrition,
- Lessons learnt from successful activities and experiences in the field like community-based nutrition, school nutrition, parental education...
- The existence of personnel for social mobilization (social assistants) that can be quickly deployed on the ground to launch community based nutrition activities throughout the country,
- The existence of education structures that can provide basic nutrition education and on-the-job training for the personnel involved in nutrition work, etc.

Sectors such as Health, Agriculture and Animal resources, Education, Information, Gender and Family, Labor and vocational training, Economy and Finance, Youth, Local Administration, Commerce, Environment, Infrastructures, can combine their efforts for the promotion of food security and nutrition of the population.

4. PRESENTATION OF THE POLICY

4.1. Guiding principles for the National Policy on Nutrition

Following are the principles behind the national nutrition policy to ensure good nutrition throughout the country:

(i) Decentralization

Rwanda is committed to good governance with decentralization of the administrative and political structures, reinforcing the power of peripheral entities (districts, sectors, cells) to manage their development. Decentralization favors direct financial support to the local entities through the Sector wide approach mechanisms that directly finance activities planned by the community development committees. Decentralization is one of the main paths to guarantee equitable access to good nutrition by Rwandans from all walks of life.

(ii) Sensitization of grassroots communities

More than 40 % of deaths among children of less than 5 years old are linked to moderate forms of malnutrition, treated by hospitals; thus many children who do not visit medical services on a regular basis are exposed to a high risk of death due to malnutrition.

Simple and affordable techniques, easy to implement by community agents allow a considerable improvement of the population health and nutrition, particularly for vulnerable people (children less than 5 years old, pregnant and breastfeeding women, elderly people, displaced people...).

These actions are, promotion of food security for household and good dietary practices, particularly for the newborn and the young child, follow up of the children's growth through regular weighting, transformation and conservation of food after harvesting, supplements of micro nutrients for target groups, spacing out births, improve water and food hygiene, and parental education.

Community-based nutrition is the most efficient approach to fight nutritional diseases and several health problems. It holds grassroots communities responsible throughout the whole management process to fight effectively nutritional problems within the community. Existing community based organizations, such as development committees supported by community health workers, must be reinforced and extended to all the districts.

(iii) Integration

Malnutrition is a multifactor problem; its prevention must be integrated in the development plans of various sectors (Health, Agriculture, Education, Commerce, etc.).

Rwanda has adopted a Health development strategy for primary healthcare, based on integration of medical care at the level of health district. A set of essential nutritional activities must be defined, taking into consideration the nutritional situation

of the country, and must be integrated at the level of health entities and community based services in each district, under the coordination of the national program for nutrition.

Other programs and strategies for Health and development (PCIME, fight against HIV, Reproductive Health...) must integrate or reinforce the nutritional component in their activities.

(iv) Inter-sectoral collaboration and partnership

The fight against malnutrition is multi-sectoral and the measures that need to be adopted to solve nutritional problems are beyond the Health sector. The collaboration of various development sectors, based upon the complementarity of interventions is essential to respond to the dietary and nutritional needs of the population.

An effective partnership with the private sector, cooperation partners, NGOs... must be reinforced to respond to dietary and nutritional needs of the population and mobilize the required resources for implementation, follow up and evaluation of the nutrition activities.

(v) Coordination

In order to reinforce the cohesion and efficiency of actions undertaken by many sectors and partners, the coordination of nutritional activities must exist at the central and the peripheral level of the national health pyramid. Each level of the health pyramid has its specific mission: conceptual and logistics for the central level, technical for the intermediate, operational for the peripheral level (i.e. health district).

Necessary actions must be taken to guaranty the synergy of interventions from different stakeholders in the nutrition area at the central, intermediate and peripheral levels.

4.2. Vision of the national policy on Nutrition

The vision of the national policy is to ensure nutrition for all throughout the country. This national policy is based on values of solidarity, ethics, equity, as well as cultural specifics and the importance of gender, for the harmonious development of Rwanda as a nation.

The national policy on nutrition, based on the situation analysis of nutrition in Rwanda, is the base for planning and reference for all the interventions in the nutrition area. It specifies the targeted mission and objectives in the area of nutrition, it prioritizes strategic orientations to achieve these objectives, it defines coordination modalities of actions at the various levels of the health pyramid of the country, it provides guidelines for follow up and evaluation of nutritional activities as well as the implementation plan and steps.

4.3. Mission of the National nutrition policy

The mission of the national nutritional policy is to guarantee a good level of nutrition to the entire population, in order to contribute to the sustainable development of Rwanda by human resources in good physical, mental and emotional health.

4.4. Objectives of the National nutrition policy

(i) General objective

The general objective of the national policy on nutrition is to improve the nutritional state of the population throughout the country.

(ii) Specific objectives

In order to improve the nutritional state of the population throughout the country, the national policy on nutrition is seeking to achieve the following specific objectives to such a level that:

- Practices favorable to the improvement of the nutritional state of the population are promoted,
- Ensure prevention of diseases linked to the nutritional deficiencies and excesses,
- Ensure prevention of mother-to-child HIV transmission through breastfeeding,
- Ensure adequate treatment of malnutrition due to nutritional deficiencies and excesses,
- Ensure nutritional supervision for people living with HIV/AIDS

5. SUMMARY OF THE DEVELOPMENT STRATEGIES FOR NUTRITION

To achieve its objectives, the national policy on nutrition has the following strategies:

5. 1. Reinforcement of the political commitment

Given the magnitude and persistence of nutrition problems over many years, their multifactor origin and their impact on different development sectors of the country, despite efforts made to date, it is important that Rwanda reinforces its political commitment in favor of nutrition and makes it a priority of governmental action for its sustainable development, through the following measures:

- Adopte and promulgate the national policy of nutrition,
- Institutionalize a national unit for nutrition in the Ministry of Health and the elaboration and implementation of its strategic plan, and its operational plan for the coordination of the control of the nutritional problems throughout the country,
- Integrate nutrition in the socio-economic developemnt indicators dans les (PRSP, Vision 2020),
- Integrate of the nutritional component in all sectoral development programs,
- Allocate an adequate government budget to fight nutritional problems and mobilize additional resources from partners, in particular financing nutrition activities through MTEF,
- Incorporate a nutrition curriculum at the primary education, secondary levels and in university and post-university education. This curriculum should be adapted to each level and aimed at resolving nutritional problems that the population faces,
- Reinstate education of level A1 and A2 nutritionists, and create a nutritionist degree and masters education program,
- Allocate nutritionists to each level of the health pyramid, and in particular in each health district, and their involvement in every nutrition related sector or program,
- Promote nutritionists' careers by endorsing their professional association and ensuring their involvement in every nutrition related sector or program,
- Prepare and/or adopt, and disseminate strategies and national protocols related to nutrition (PNBC protocol, protocol for the treatment of acute malnutrition, Strategic framework for the nutrition of the newborn and the young child in the context of HIV/AIDS in Rwanda, national norms and guidelines for counseling, voluntary HIV testing and the prevention of mother-to-child HIV transmission, Guide for the dietary and nutritional support of PLH, national strategy against vitamin A deficiency, national strategy against anemia...),
- Support organization of grassroots communities to promote food security for households and production of food rich in nutrients,
- Reinforce policies for food transformation, enrichment/fortification and conservation.
- Develop school and pre-school nutrition programs for the prevention and monitoring of malnutrition,

- Reinforce regulatory quality controls of imported and local foods, including water and other commercial drinks,
- Reinforce national regulation on iodized salt by revising iodization rate to respect the new standards,
- Reinforce collaboration between the sectors involved in nutrition, and the development of continuous dialogue mechanisms among nutrition partners,
- Implement the agricultural policy; especially the land reform recommended by the Ministry of Agriculture to improve food security and household revenue, and promote production of foods such as rice, maize, and potatoes instead of banana beer.
- Implement habitat policy which favors the creation of agricultural spaces and promotion of settlement clusters (Imidugudu) and better management of the environment.
- Integrate nutrition in some key ministries such as MINEDUC, MIGEPROFE, MINAGRI, Primature, to support Ministry of Health efforts
- Promotion of the profession of nutritionists by promoting professional associations and their utilization in all relevant nutrition related programmes or sectors
- Elaboration and/or adoption of key strategic documents or relevant nutrition related national protocols (protocol on community based nutrition, national protocol on treatment of severe malnutrition, vitamin A deficiency control, iron deficiency control etc.)

5. 2. Promotion of optimal infant and young children feeding

The infant and child mortality is related to several factors such as inappropriate breastfeeding practices and complementary feeding from 6 months up to 24 months. Children from 0 to 5 months who are not breastfed have respectively 7 to 5 times the risk of dying of diarrhea and pneumonia. Promoting optimal child feeding makes it possible to reduce child mortality. Indeed, according to the results of the Bellagio study (Lancet, 2003), the practice of breast-feeding and optimal complementary feeding respectively constitute the first and the 3rd most effective preventive interventions of child mortality reduction (13 % and 6%). For Rwanda where breastfeeding is a tradition, efforts will be provided to maintain this practice through the following strategies:

- Promotion of exclusive breastfeeding for infants from birth up to six months, including infants born to HIV positive mothers who cannot meet the AFASS` conditions (acceptable, accessible, feasible, sustainable, and safe) for replacement feeding,
- Promotion of continuous breastfeeding up to twenty-four months or more, with an appropriate complementary feeding from 6 up to 24 months at the minimum,
- Adoption and implementation of the national Code of marketing of the substitutes of breastmilk at the level of the health services, pharmacies, the private sector, and media.
- Elaboration, adoption of a national strategy of infant and young children feeding (IYCF) in the context of VIH/Sida in Rwanda, in order to guide and support an appropriate responsible choice for exposed children to VIH/SIDA,

- Integration of IYCF in the standards and norms of voluntary counseling and testing and prevention of mother to child transmission of HIV/AIDS, and pediatric care,
- Support the development and diffusion of the Guides on nutritional support and care to people living with VIH/SIDA, including children and people affected by HIV/AIDS,
- Institutionalization of the celebration of the national breastfeeding week,
- Support initiatives of protection of breastfeeding at the national and community level (Initiate baby friendly hospitals and communities), breastfeeding support groups,
- Protection of working breastfeeding women who work in the formal and informal sector, private and public sectors by adoption or improvement of a law supporting breast-feeding (paid maternity leaves, prolongation of maternity leaves, creation of breast-feeding space in the work spaces and public area),
- Support for women who decide to exclusively breastfeed up to the first 6 months, including the HIV positive women,
- Integration of IYCF in the curriculum of nursing schools, School of Medicine and public health.

5.3. Promotion of food security and good practices in households

The following strategies can increase the availability of and the accessibility to nutrient-rich foods for the population, in particular in vulnerable families with vulnerable children including child headed households and improve dietary and nutritional practices in decentralized entities:

- Promote production and consumption of local foods rich in essential nutrients, through the practice of vegetable gardens, small sized farming, and fish-farming,
- Promote income generating activities to improve the population's purchasing power,
- Promote good transformation and conservation techniques of food after their harvest,
- Reduce taxes on basic imported food
- Promote trans-border trade of food products
- Harmonize the distribution of food products in the countryside
- Standardize prices for basic food products and inform the population
- Promote exclusive breastfeeding for newborn for 6 months, including babies born to HIV positive mothers who do not fulfill the conditions for replacement feeding,
- Promote continuous breastfeeding until the age of twenty four months or more, with age appropriate complementary foods for 6 month old infants,
- Based on available local food, advise on good dietary practices for pregnant or breastfeeding women,
- Promote the consumption of nutrient rich or enriched food such as fruits, vegetables, iodized salt, and other fortified foods,
- Advise on food preparation methods that best preserve essential nutrients

- Promote health proportions of meals within the family, giving priority to vulnerable groups,
- Promote norms and standards for food and water and food hygiene measures
- Promote the utilization of insecticide sprayed mosquito nets
- Promote of the presumptive treatment of malaria among pregnant women,
- Promote adequate diet and nutritional practices and a healthy way of life to prevent dietary excesses, alcohol abuse, tobacco use, etc..,
- Promote regular exercise especially for people with a sedentary lifestyle.
- Implement the agricultural policy; particularly land reform recommended by the Minister of Agriculture to improve food security and improve household revenue, amongst which is the promotion of the production of priority foods such as rice, maize, and potatoes instead of banana beer; as well as the policy for the regionalization of cultures.
- Implement the habitat policy for the creation of agricultural spaces and promotion of settlement villages (Imidugudu) as well as improved management of the environment.

5.4. Re-enforcement of national capacity in nutrition

- Integration of nutrition in the curriculum of basic education at the level of primary and secondary education
- Re opening of the training of nutritionists A0, A1 and A2.
- Integration of the Nutrition in the curriculum of medical school, other universities and national institutes (KIST, KHI)
- Institutionalization of training of Nutritionists in public health and the school of public health of Butare and in postgraduate, adapted to each level and centered on the resolution of the nutritional problems to which the population is exposed,
- Training of health providers, development agents, members of associations and ONG, community members.

5.5. Prevention of nutritional deficiencies and excess related diseases

- Regular follow up of the growth of children from 0 to 5 years old, at the health center level as well as in community based services,
- Regular follow up of the weight gain of pregnant women through CPN activities in health centres and communities (PNBC, community based PCIME),
- Supplement vitamin A, once every 6 months, to children from 6 to 59 months and integrate other health activities like de-worming,
- Supplement vitamin A to post-partum women for 6 weeks following delivery,
- Based on up to date information supplement iron, folic acid, and other micro-nutrients to pregnant and breastfeeding women
- Based on the nutritional situation supplement vulnerable groups with other micro-nutrients such as zinc ,
- Enrich basic foods with micro-nutrients (salt, sugar, oil, maize flour, etc.)

- Regular follow up of the consumption of nutrient enriched foods in household such as iodized salt, etc.
- Systematic de-worming of children,
- Establish a nutritional surveillance system integrated in the SIS.

5. 6. Nutritional support to PLWA and their families

People living with HIV/AIDS, including children need nutritional support as a component of the minimum care package. Nutritional counseling is an important content of nutritional support. Nutritional support includes:

- Definition of minimum food package for PLWA and affected people through a family package, including infants born to HIV infected mothers,
- Support to affected and infected households by providing food supplements for a short period of time that will improve not only their nutritional and health status, but also allow them to resume their regular activities for their own care,
- For exposed children, support will be provided to mothers who decide to exclusively breastfeed during the first six months to ensure better cessation and introduction of complementary feeding. Those who decide to use replacement feeding will be also supported.
- As much as possible and through income generating activities, affected and infected households will be supported to ensure appropriate complementary feeding for children and appropriate nutrition for mothers and the entire family,
- Patients with moderate forms of malnutrition will receive adequate care, particularly food supplements and drugs in health care facilities according to adopted protocol and also at community level. The necessary intake must be available in the nutritional services of each health care facility
- Patients suffering from acute or severe malnutrition or clinical forms of other nutritional deficiencies must receive adequate care in nutritional services at health centers, according to the national protocol and therapeutic schedules endorsed by the Ministry of Health. The necessary intake must be available in the nutritional services of each health care facility
- Reinforcement of national capacities and will target:
 - Health professionals in nutritional facilities and health centers for the prevention of nutritional diseases and mother to child HIV transmission ; follow up on nutritional activities in communities and health centers; adequate care for diseases related to deficiencies or excess in nutrition; nutritional support to PLWA and to HIV/AIDS patients under ARV
 - Health professionals in maternity, pediatrics, PMTCT and VCT wards for the implementation of baby friendly hospital initiatives, respect of the national code on the marketing of breast milk substitutes and the improvement of counseling to prevent mother to child HIV/AIDS transmission.
 - Community health workers in order to promote community based nutrition, food security, good dietary practices, follow up of children's growth from 0 to 5 years, distribution of vitamin A and iron to target

population, promotion of food related hygiene as well as other behavior changes that positively influence the population's nutritional and health status.

- The role of women's organizations as a forum to set up nutritional programs for the community, sensitization programs for behavioral change for better nutrition in communities and families.
- Parents and families through the re-enforcement of parenting education and support to improve familial competency and behavior regarding children, mother and family nutrition and reproductive health

At the same time patients with chronic disease (obesity, diabetes, cardio-vascular disease) will receive adequate care in hospitals according to appropriate protocol. Necessary inputs must be available at hospital facility level.

5. 7. Promotion of school and preschool nutrition

To improve the nutritional status of children and school performance, including HIV/AIDS orphans and vulnerable children, the following actions must be taken:

- malnutrition monitoring
- Set up drinking water taps and hygienic toilet installations
- With the community's help establish support food stocks in order to ensure the sustainability of an adequate school diet
- Establish school canteens to supplement children's diets at school
- Provide supplements for children's food rations and micronutrients
- Systematic deworming and parasite prevention for children
- Promote gardening and small sized rearing at school

4. 8. Communication for behavior change

Because clinical symptoms associated with malnutrition appear late, malnutrition is often an unknown problem. Communication for behavior change towards nutrition has to be reinforced at central, intermediate, and peripheral levels. Communication should provide pertinent educational messages to trigger voluntary changes in dietary behavior and practices that have an impact on nutrition.

Communication should use various media channels (health services, schools, churches, women's associations, audio-visual press, NGOs, etc...). To reach landlocked and poor rural population special emphasis shall be placed on local communication: community health or nutrition workers, rural radios, conferences, plays, traditional media (street shouters, songs, sketches...)

5.9. Resource mobilization and partnership

Nutrition is a sector with multifactorial dimensions. Its complications and solutions extend way beyond the health sector. Partnership in the financing of the sector and

the mobilization of all partners is essential. Moreover, the mainstreaming of already existing resources can improve the financing of the sector. For example, funds for the control of HIV/AIDS and malaria can contribute to support the sector in the country. Integration of nutrition indicators in other development programs will make it possible to support nutrition even if there are not sufficient funds allocated specifically for nutrition. The medium-term expenditure (MTEF) is also an appropriate channel of financing for nutrition activities by the government.

6. PROGRAMS FOR THE DEVELOPMENT OF NUTRITION

6. 1. Package of essential activities for nutrition

To ensure improvement of the nutritional status of the population, a set of essential activities to implement in all districts has been established.

The activities essential for the development of nutrition are:

- Promote exclusive breastfeeding for 0- 6 months
- Promote continuous breastfeeding up to 24 months or more and complementary feeding from six months onwards
- Promote nutrition of pregnant and breastfeeding women
- Regular follow up of children's growth from 0 to 5 years
- Follow up of student's nutritional status
- Regular follow up of pregnant and breastfeeding women weight gain,
- Provide additional vitamin A to target groups (children 6-59 months, post-partum women),
- Provide target group with additional iron and folic acid (pregnant women, breastfeeding women, sick children, etc...)
- Provide other essential nutrients (zinc, etc.)
- Regular follow up of consumption of iodized salt in households
- Promote production and consumption of food rich in or enriched with nutrients
- Promote use of mosquito nets impregnated with insecticides
- Systematic parasite treatment for children and pregnant women alongside the provision of dietary supplements
- Prevent mother to child HIV transmission
- Promote healthy living habits and good dietary practices to prevent diseases related to excess of weight
- Promote the feeding of sick children
- Adequate care for severe malnutrition cases in health facilities as well as adequate care of moderate cases within the community
- nutritional support for people living with HIV/AIDS
- Promote family planning
- Promotion of hygiene.
- Communication program for behavior change

6. 2. Implementation programs for the package of essential nutritional activities

Le paquet d'activités essentielles de nutrition peut être mis en œuvre à travers les programmes ci-après :

- Programme of infant, young children and mother nutrition
- Programme of community based nutrition
- Programme of support to household food security
- Programme of micronutrient supplementation and deworming
- Programme of food fortification in nutrients (PFAN)
- Programme of control of nutritional related chronic diseases

- Programme of nutritional support to PLWA and other vulnerable children
Programme of preschool and school nutrition
- Programme of support to the Coordination of Nutrition.

7. INSTITUTIONAL FRAMEWORK FOR POLICY IMPLEMENTATION

7.1. Coordination bodies and implementation structures

7.1.1. At national level:

7.1.1.1. Intersectoral Commission of nutrition

To allow harmonization, exchange and synergy of efforts for the promotion of nutrition as well as the integrated management of development programmes of nutrition the intersectoral committee is formed by :

- Ministry of Health
- Ministry of Local Administration
- Ministry of Agriculture and Livestock
- Ministry of Gender and Family
- Ministry of Education
- Ministry of Professional training and Labor
- Ministry of Economy and Finances
- Ministry of youth
- Ministry of Trade /ORN
- Ministry of Infrastructures
- Ministry of Land and Environment
- NGOs,
- consumer associations (ASCORWA),
- Private sector federation
- Recognized Nutrition Associations
- Any other partners or structures identified by the Commission.

Representation of the above institutions should be at the level of the National Director or Assistant Director. The chair of the commission is rotates while the secretariat is assumed by the Nutrition Unit of the Ministry of Health.

7.1.2. Ministère de la Santé

Within the Ministry of Health, nutrition activities are implemented by the Nutrition Unit which is supported by the Nutrition Working Group.

7.1.2.1. Nutrition Unit

The development of the national nutrition program falls under the responsibility of the Ministry of Health. A national Nutrition Unit is established in the Ministry of Health, under the Permanent Secretary, to coordinate the implementation of the national nutrition program throughout the country.

The coordination of nutrition activities is ensured at central level by the the Nutrition Unit. Its essential aim will be to ensure the implementation of mechanisms and activities for the development of the national nutrition program, such as:

- Lobby for mobilization of nutrition partners

- Mobilize human, material, and financial resources
- Prepare regulation proposals (policies, strategies, protocols, guidelines, treatment guidance, etc.)
- Prepare nutrition annual action plans in collaboration with other relevant partners
- Prepare periodic activity reports
- Regular discussions with partners
- Memorandum of Understanding; Agreement of NGO nutrition programs in collaboration with Ministry of Health planning unit
- Prepare training modules and capacity enhancement program for all field participants
- Prepare and incorporate nutrition in the health communication plan
- Prepare and implement a follow up plan for nutrition activities, including innovative approaches (PNBC, school feeding...)
- Propose updated nutrition indicators and incorporate them into the national epidemiological warning system
- For monitoring, create tools for data collection of nutritional activities
- Incorporate nutrition in the control and prevention of HIV/AIDS programme and in other development programs
- Follow up, supervision, epidemiological surveillance and evaluation of nutritional activities
- Implemente a warning system and rapid interventions to prevent and take care of nutritional problems in emergency situations
- Promote operational research that addresses nutrition problems through innovative approaches adapted to the local context

Composition of nutrition unit

It will include 4 Desks:

- Nutrition and HIV/AIDS Desk (support to PLWA, nutrition rehabilitation)
- Infant and maternal Nutrition Desk (IYCF, maternal Nutrition, school nutrition)
- Micronutrient deficiencies Control Desk (Vit A, iron, iodine, zinc, supplementation, food fortification)
- Community based nutrition (CBN, Sfood security, surveillance)

7.1.2.2. Nutrition Working Group

It is created within the Health Cluster of the Ministry of Health; Nutrition Working Group whose role will be:

- Ensure the implementation of the national nutrition policy
- Support programmes'conception and provide technical input on the essential orientation for the development of nutrition
- Advocate for resource mobilization for nutrition activities

- Ensure the integration of nutrition in all the plans of the technical departments of the Government
- Ensure technical collaboration and participation of different sectors and partners involved in nutrition.

7.1.2.3. At health district level, nutrition activities are integrated in the minimum package of the district and health centres as the other health programmes.

7.1.3. At Community level

At the grassroots level, in the administrative districts, sector and cell activities are coordinated by the CDC through community based nutrition. Alliances will be established at the aforementioned levels (district, sector, cell).

7.1.3.1. District Alliance for Nutrition

To ensure a concerted control of malnutrition, the intersectoral Alliance for Nutrition (DIAN) has been developed, coordinated by the Mayor of District who will ensure that nutrition activities are integrated in the district's CDC plans. The Alliance is composed of different members as follow:

- The Mayor of the District who is the Chair
- The CDC Chair
- The Sector Coordinators
- The Head of the Health District who is the Permanent Secretary
- 1 representative of women organization structures (SOF)
- 1 representative of youth organization structures (SOJ)
- 1 representative of religious organizations /NGOs

7.1.3.2. Sector Alliance for Nutrition

The Sector Alliance for Nutrition is based on CDC of the sector. It is composed of different members as described below:

- The Coordinator of the Sector who is the Chair
- The Chair of the CDC
- The Cell Coordinators
- The Responsible of Health of the Sector,
- 1 representative of women organization structures (SOF)
- 1 representative of youth organization structures (SOJ)
- The Titulaire of the Health Center , Permanent Secretary
- 1 representative of religious organizations /NGOs

7.1.3.3. Alliance de Nutrition de la cellule

The Sector Alliance for Nutrition is based on the community CDC of the Cell. It is composed of 7 members who are:

- The Cell Coordinator who is the Chair
- The CDC Chair
- The responsible of Health of the CDC, Permanent Secretary

- 1 representative of community workers
- 1 representative of women organization structures (SOF)
- 1 representative of youth organization structures (SOJ)
- 1 representative of religious organizations /NGOs

7. 2. Monitoring and evaluation

To ensure that activities are being carried out as planned and collect information useful to facilitate the decision-making process on corrective actions; all development programs have to be followed up. In addition, periodic evaluations are necessary to establish the level at which the objectives have been achieved.

Easily accessible data will be regularly collected in health centers and communities, to follow up on progress indicators of the nutritional programs implemented in the field throughout the country. In addition, every opportunity for nationwide surveys on follow up, evaluation and census (MICS, EDST, EICV, etc...) will be fully utilized to include pertinent indicators for the nutritional state of the population.

Nutritional surveys on epidemiological surveillance and evaluation will be regularly carried out, following appropriate protocols, to evaluate the progress and impact of nutritional interventions as well as the extent to which the objectives are being met.

Surveys and operational research will also be carried out to address specific problems identified during the implementation of nutritional activities.

To prevent nutritional emergencies, ANANUT will reinforce collaboration with all existing structures that collect and analyze bioclimatic, environmental, demographic and agricultural data for the early detection of signs of disaster that can affect the nutritional state of populations and take adequate measures in time.

7. 3. Implementation steps

Implementation of the national nutrition policy will follow these operational steps:

- (i) prepare strategic nutrition plan,
- (ii) Prepare operational nutrition plans,
- (iii) Adopt and promulgate the national nutrition policy,
- (iv) Establish the national nutrition program,
- (v) Adopt national strategies, standards, protocols, guidelines and procedures for nutrition,
- (vi) Reinforce nutrition in health communication strategy,
- (vii) Evaluate the training needs,
- (viii) Prepare training modules and other educational materials

- (ix) Strengthen capacity of all stakeholders, from central to local level (training trainers, on-the-job training for agents, reinstate the training of nutritionists at all levels of the education system),
- (x) Reinforce regular follow up of nutritional data,
- (xi) Monitor regularly nutrition interventions,
- (xii) Mid-term and final evaluation of the level of achievement of objectives.

7.4. Role of various sectors in promoting nutrition

7.4.1. The Government

The Government through its Ministries, Institutes, Committees, Departments and Agenceis will support nutrition activities at various levels. Roles and responsibilities of differents Ministries and Departments in the implementation of the Nutrition Policy are defined in the paragrahs below. In addition, Rwanda Government may assign supplementary responsibilities as needed.

7.4.1.1. Role of the Ministry of Health

- Adocacy and lobbying for adoption and promulgation of the national nutrition policy
- Increase the annual budget allocated to nutrition
- Coordination of the implementation of national nutrition policy
- Establish a Nutrition Unit within the Ministry of Health as the implementation framework for the national nutrition policy
- Mobilize partners and resources to support activities related to research, advocacy, coordination, monitoring and evaluation of nutrition programmes
- Capacity enhancement for coordination and implementation of nutrition activities
- Reinforce the role of nutritionists at the central and local levels
- Development of commuication and advocacy strategy for nutrition to inform and increase
- Establish and operationalize a national programme for research, monitoring and evaluation of nutrition programme
- Define collaboration with other ministries and partners of the norms and standards of nutrition to implement at each level
- Leadership for integration of nutrition in other internal health programmes (HIV/AIDS, IMCI, Maternal health school health etc., partiularly support the implementation of nutrition activities through the most funded programmes in health facilities
- Reinforcement of the nutritional surveillance system in collaboration with the Ministry of Agriculture, including mapping of food insecurity and malnutrition

- Elaboration of nutrition contingency plan in collaboration with relevant Ministries and partners
- Advocacy for the integration of nutrition in the programme of other development sectors (Preschool and School programme, Food Quality contrôle, fortification etc.)
- Invite coordination meetings and make a proposal of agenda
- Support in the establishment in collaboration with MINALOC of different decentralized nutrition structures
- Initiation of necessary actions for the implementation of the nutrition policy
- Leadership for hygiene of food in restaurants, streets and public spaces as well as within households
- Ensure the monitoring of the implementation of the code on the marketing of breastmilk substitutes in collaboration with the Ministry of Trade/ORS
- Submission of regular and complete annual reports on the implementation of nutrition programmes to different ministries and partners
- Monitoring and evaluation of the implementation of the nutrition policy

7.4.1.2. Role of the Ministry of Local Administration

- Advocacy for nutrition activities
- Support the establishment of a Nutrition Alliance in each local structure (District, Sector, Cell)
- Ensure the incorporation of CDC nutrition activities in annual plans at all levels (District, Sector, Cell)
- Make recommendations for forecasting and financial resource mobilisation for nutrition activities in the annual development plan of CDC at all community levels (Community nutrition days, CECOME, CBN, vitamin A supplementation etc.)
- Contribute to the mapping of households at risk of food insecurity and malnutrition with the Ministry of Agriculture
- Promote household food security by supporting community agricultural activities, land donation for agricultural activities, promotion of improved seeds, dissemination of modern food conservation methods
- Reinforcement of nutritional support to vulnerable people (PLWA, orphans, elderly, displaced people, child and women headed households, street children etc.)
- Prepare a contingency plan for nutrition
- Ensure children's protection through respect of children's rights
- Monitor the implementation of nutrition activities at decentralized level

7.4.1.3.. Role of the Ministry of agriculture and animal resources

- Promote the policy for storage and processing of food products
- Promote the production and the dissemination of nutrient rich food varieties
- Disseminate highly productive agricultural techniques
- Promotion of irrigative crops in areas with insufficient rains
- Implement agricultural policy, especially land reform promoted for the improvement of food security and the increase in household revenue,

- promote priority crops such as rice, maize, potatoes as opposed to beer banana
- Promote better agricultural technology that require less manpower
- Prepare a contingency plan for nutrition
- Reinforcement of nutritional surveillance system in collaboration with the Ministry of Health, including mapping of food insecure and malnutrition zones
- Support farmers for market oriented production
- Promote better distribution of food throughout the country
- Identify and support households and families with food insecurity problems, including those in difficult circumstances

7.4.1.4. Role of the Ministry of Education

- Establish and operationalize school nutrition and health programme in collaboration with the Ministry of Health in schools
- Reinforce and/or incorporate nutrition into the curriculum at all levels of the education system: primary, secondary, technical schools, and universities
- Institutionalize growth monitoring for preschool and school children and secondary schools,
- Incorporate gardening and small scale farming in schools
- Reinstate school canteens in preschool and primary schools based on community initiatives
- Integrate Nutrition in parenting education
- Scale up of HAMS in all primary schools
- Provide primary schools with potable water and latrines for better health and nutrition in collaboration avec MININFRA
- Reinstate nutritionists training at all levels (in universities, technical schools, etc.)
- In collaboration with the Ministry of health, start a nutrition class in pre-schools and primary schools
- Introduce the HAMS technique in all schools in collaboration with MININFRA,
- In collaboration with MININFRA improve nutrition and health; provide potable water and build latrines in all schools
- Respect children's rights

7.4.1.5. Role of the Ministry of Gender and Family promotion

- Advocacy to have nutrition as a right for women and children
- Advocacy to increase maternity leave duration for working breastfeeding women in the formal sector
- Advocate for maternity leave for working breastfeeding women in the informal sector
- Advocate to harmonize the duration and advantages of maternity leave (entirely paid leave) for working women in private sector with public sector
- Advocacy and leadership for establishing breastfeeding spaces in public , and work place
- Support syndicated groups for the protection of pregnant and lactating women in the formal and informal sectors

- Support for the establishment of breastfeeding women support groups at both community and work place
- Advocacy for men's involvement in the control of nutritional problems
- Incorporate nutrition activities in women's associations
- Identify and support families and households with food insecurity and malnutrition, mainly households in difficult situations
- Support women's associations for the promotion of household food security, promotion of exclusive breastfeeding during the first 6 months, good dietary practices, children's growth monitoring, family planning, etc.
- Support the implementation of policies that favor children and women such as extended and paid maternity leave, breastfeeding time, breastfeeding space, code on breast milk substitutes etc.

7.4.1.6. Role of the Ministry of Public Service, Skills Development, Vocational Training and Labor

- Advocacy for nutrition
- Increase maternity leave duration for working women in both formal and informal sector
- Advocacy for maternity leave for women working in the informal sector
- Harmonize duration and maternity leave benefits (paid maternity leave) for women working in the private sector, with the public sector
- Increase of daily time allocated to breastfeeding for breastfeeding working women in private, public, formal and informal sectors
- Advocacy and leadership for establishing breastfeeding spaces in public and work places
- Support worker's unions for the protection of pregnant and lactating women's rights in both formal and informal sectors
- Support the establishment of breastfeeding women support groups in work places
- Ensure that working breastfeeding and pregnant mothers are secure while breastfeeding
- Monitor the quality of foods sold in workplaces in collaboration with the Ministry of Health and ORN
- Advocate for regular information, awareness of good nutrition, monitoring and improvement of the nutritional status of workers for better productivity.

7.4.1.7. Role of the Ministry of Economy and finances

- Add improved nutrition as a development indicator
- Incorporate nutrition into PRSP priorities
- Oriente ministries to allocate a budget line for nutrition in their MTEF.

7.4.1.8. Role of the Ministry of Youth, Sports and Culture

- Promote and integrate good nutrition in the programmes of youth clubs, anti-AIDS clubs, and sports clubs, etc.
- Promote good nutrition and diet as a traditional and cultural value
- Promote a fair intra-familial share of meals
- Support youth in promoting good nutrition

7.4.1.9. Role of Ministry of Commerce and ORS

- Define and disseminate food quality standards
- Reinforce food quality control: iodized salt, usual local foods, restaurants, imported foods, breast milk substitutes, and children's food, water
- Promote the enrichment in essential nutrients of commonly used foods;
- Set up fast and reliable distribution and sales mechanisms for food products in all regions of the country
- Participate in the monitoring of the implementation of the code on the marketing of breastmilk substitutes in collaboration with the Ministry of Health

7.4.1.10. Role of the Ministry of Land and Environment

- Strengthen tree planting and tree nurseries to protect ecosystems that favor intensive agriculture
- Promote potable water, clean food and water, sanitation (disseminate PHAST methodology in all cells), and HAMS in all schools
- Implement housing policy that saves land for agriculture through grouped housing (Imidugudu) and better management of the environment.

7.4.1.11. Role of the Ministry of Infrastructure

- Improve road infrastructure to facilitate commerce of food products
- Promote water quality and management for balanced nutrition and good health
- Set up a master plan for housing and town planning department for improved management of agricultural spaces.

7.4.1.12. Role of Teaching and Research Institutes

- Reestablish the training of nutritionists with various degrees (universities, vocational schools etc.)
- Reestablish training of nutritionists
- Reinforcement and integration of nutrition education in the curriculum of vocational schools and universities.

7.4.2. Role of NGOs, Associations development partners

- Advocacy for nutrition
- Provide services and facilities for the implementation of nutrition programmes
- Provide technical and financial support for the development of nutrition program

7.4.3. Role of private sector

The private sector will be encouraged to:

- Provide quality nutrition services
- Follow up guidelines set up by the Government in the domain of nutrition.

7.4.4. Role of communities through nutrition alliances

7.4.4.1. District Alliance for Nutrition: Mission is to:

- Ensure that nutrition is integrated in the district annual plans.
- Ensure that health centers and hospitals as well as grassroots communities (cells) within the district incorporate and implement essential activities related to nutrition.
- Prepare nutrition action plans and their implementation based on needs identified by communities.
- Ensure that health professionals and community health workers receive training.
- Based on community need, ensure regular provision of necessary inputs.
- Ensure follow up of nutrition activities in health care facilities and communities.
- Ensure epidemiologic surveillance of nutritional problems in the community.
- Prepare comprehensive reports incorporating nutrition activities.

7.4.4.2. Sector Alliance for Nutrition: Mission is to:

- Ensure that the sector incorporates and implements essential activities related to nutrition through the CDC plan.
- Prepare nutrition action plans and their implementation based on needs identified by cells.
- Based on cell's needs, ensure regular provision of specific inputs.
- Ensure follow up of nutrition activities at the cell level.

7.4.4.3. Alliance de Nutrition de la cellule : This alliance will:

- Ensure that the cell incorporates and implements essential activities related to nutrition in community and development programs.
- Prepare community based nutrition action plans and their implementation according the identified needs.
- Ensure that health professionals, community health workers, beneficiaries and associations (SOF, SOJ, etc.) receive nutrition related training.
- Based on community need, ensure regular provision and distribution of specific inputs.
- Ensure the follow up of nutrition activities within the community.

7.4.5. Role of families

Families have primary responsibility for the improvement of the nutritional status of children, women, and other family members.

8. COSTS AND FINANCING

All nutrition programs require costs related to human and material resources. Those vary from one locality to another, from one programme to another (Community program versus health facility based programs). The budget will have to come from various sources: community and family contributions, the private sector, NGOs, development partners, philanthropic organizations, and government of Rwanda technical departments.

Implementation costs of the Nutrition Policy will be paid at various levels: national, district, sector and the cell. The major part of these costs will cover primarily the formulation/review of the policy and the related strategies, advocacy, capacities reinforcement of health providers, families, parents and communities, implementation of the projects, research, coordination, and monitoring/evaluation. The budget will include costs already supported partially or completely by certain technical departments, as the nutrition is multisector.

The national level costs will support various Ministries, institutes for setting up their activities, conducting capacity building activities, development or update of the training materials or nutrition package. For the administrative districts, costs will relate to the starting of the activities (supplies etc.), training of service providers on all levels, support districts nutrition alliances, advocacy. The costs at Community level will refer to the contribution to training, implementation and supervision, equipment and different inputs for programme implementation.

The Government recognizing that nutrition is an integral part of the priorities for national development and also as a key strategy to tackle the MDGs, after adoption of this policy will:

- Guide the Ministry of Finances in its budgetary orientation to the various line ministries through the medium-term expenditure framework (MTEF) to set a certain proportion of their regular budget to the programs of nutrition.
- Involve the private sector for their participation in the funding and the implementation of the policy of nutrition.
- Advocate for the contribution of the Rwanda Development Fund to the financing of the programs of nutrition.
- Motivate development partners to increase their budget allocation for nutrition activities.

Districts will allocate a certain percentage of their total annual budget to nutrition programs, including income generating activities for communities, motivation of the community animators involved in the program's implementation.

Families, parents, communities will contribute to nutrition programs in terms of materials, labour or inputs in kind, provision of food for children and other vulnerable groups, contribution for incentive for community involved in the program's implementation.

Private sector will contribute to provide quality nutrition services to the population, pay wages of their workers, train staff, care and support vulnerable people including those affected and infected by HIV.

Development partners and NGOs will provide technical and financial support for capacities building of professionals, programme implementation, research, dissemination of successful experiences, etc...

9. CONCLUSION

Malnutrition weakens, debilitates, and kills. Malnutrition affects all development sectors and brings about high social and economic costs; increased mortality and morbidity, loss of human potential, decrease in skills and qualifications, lower productivity, higher poverty with intergeneration effects. Malnutrition can seriously jeopardize the achievement of the MDGs. The control and prevention of malnutrition is therefore a priority.

Nutrition is essential for the development of human resources that are indispensable for poverty reduction. Simple and affordable techniques have proved to be efficient in the fight against malnutrition such as breastfeeding, which is one of the most effective strategies to promote children health.

Nutrition plays an important role in the fight against HIV/AIDS: it increases the efficiency of medications, decreases ARV side effects and contributes to the longevity of people living with HIV. Given the deterioration of the nutritional situation in Rwanda, the HIV/AIDS pandemic and its consequences on women's and children's nutrition and health, as well as the role of nutrition in the fight against AIDS; the immediate adoption of a national policy of nutrition is highly recommended. This policy has to be adapted to realities and specifics of the country and to its development goals.

The adoption of a national nutrition policy will allow preparation of guidelines and pertinent strategy options as well as efficient implementation mechanisms and interventions in order to reinforce the fight against malnutrition and HIV/AIDS.

Through adoption and promulgation of this policy, the Government of Rwanda reaffirms its commitment to a better nutrition for its population.

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ANNEXE 1. JOB DESCRIPTION

1. Director of nutrition unit

The Nutrition Unit is lead by a National Director, having sufficient nutrition technical qualifications and managerial skills. His/her primary duties are to coordinate the implementation of the policy and nutrition strategies at national level, specifically:

- ensure the coordination of the Nutrition at the national level,
- ensure advocacy partners and resources mobilization
- ensure implementation of intersectoral collaboration,
- ensure implementation of the technical support for the development of nutrition programmes in the country,
- establish mechanisms of good management of the unit resources
- implement behavior change communication plan for nutrition

The Nutrition Unit is composed of 4 Desks: Nutrition and VIH, child and mother nutrition, Control of Micronutrient deficiencies.

2. Responsible of the Nutrition and HIV/AIDS Desk will:

- Implement programs of nutritional rehabilitation, nutritional support for PLWA, care for people affected by nutrition related chronic diseases
- Provide logistic support to nutrition activities
- Give a technical support for the training of the trainers
- Supervise monitor and evaluate nutrition activities within the framework of his/her responsibility.

3. The Responsible of the infant and maternal Nutrition will:

- Follow up of the implementation of the activities on the food of the young child through the promotion of the initiative friendly hospitals babies
- Protect the code of marketing of the substitutes of the mother's milk nutrition of pregnant and lactating women
- Provide technical support for activities under his/her unit;
- Provide technical support for activities under his/her unit;
- Support training and supervision, monitoring of nutrition activities within the framework of his/her responsibility.

4. The Responsible in charge of Micronutrient Deficiencies Desk will :

- Follow up the implementation of the program activities for micronutriments (vitamin A, folic acid and iron, Iodine, zinc) and deworming, food fortification;
- Provide technical support for activities under his/her unit;
- Support training, supervision and monitoring of the activities within the framework of his/her responsibility.

5. The Responsible for Community Based Nutrition will:

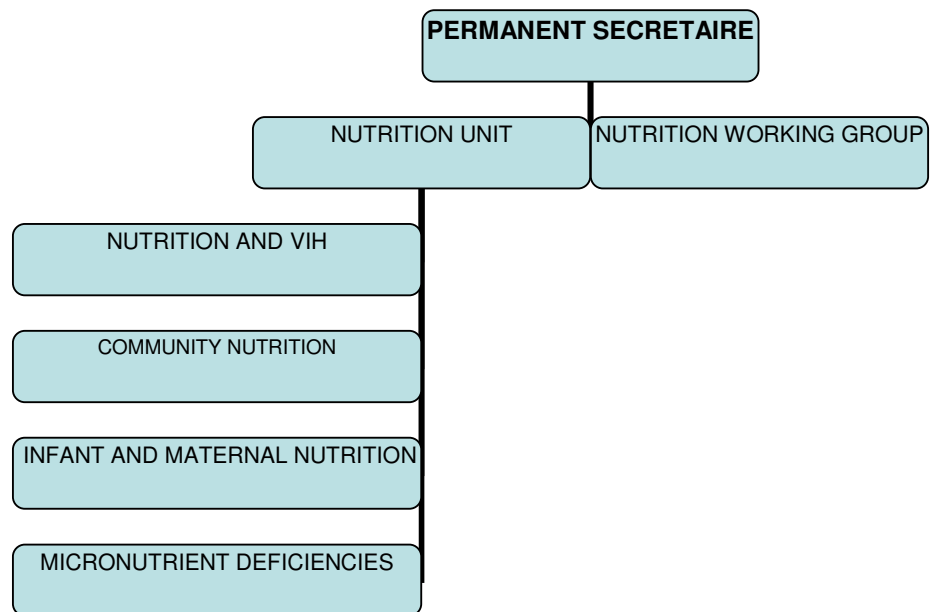
- Establish the Program of Community Based Nutrition
- Support and implement the household food security
- Support preschool and school nutrition programm
- Provide technical support for activities under his/her unit;

- Support training, supervision and monitoring of the activities within the framework of his responsibility

ANNEXES II

ORGANIGRAMME DE L'UNITE DE COORDINATION NATIONAL DE NUTRITION

MINISTERE DE LA SANTE



ANNEXES III

AU NIVEAU COMMUNAUTAIRE

