Document 7.b – Bamisagora.org

« MAQUIS BÉBÉS BAMiSA»

The term “maquis” originates from Burkina Faso and means a cafe or popular restaurant. “Maquis Bébés BAMiSA” (MBB) refers to a similar type of place, though specifically designed for **infants and children.** It is both a restaurant and a centre for **nutritional education**. The BAMiSA gruel is prepared there and sold at a cost low enough for families to afford. In other countries, the term could be changed to adapt to local usage.

The Maquis Babies BAMiSA aims to contribute to the **sustainable** improvement of child health.

This document offers the information and guidance necessary for all associations that are interested in setting up their own *Maquis Bébés BAMiSA* while also taking local constraints into consideration.

PART 1

DESCRIPTION OF “MAQUIS BEBE BAMISA”

1. OBJECTIVES for creating MBBs

“Education, prevention, assistance”

A long term objective is education: to give mothers the information they need to properly feed their children with maximum autonomy.

A medium term objective is prevention; to ward off children malnutrition

A Short term objective is solidarity to organize the distribution of the gruel in situations of extreme poverty or food crisis.

2. CHARACTERISTICS of the Maquis Bébés BAMiSA (MBB)

2.1 Nutritional information

A Maquis Bebes BAMiSA provides children and their mothers **with The BAMiSA gruel which is a high protein and energy value food that is prepared on site.**

The BAMiSA gruel is supplied as an alternative to traditional gruels prepared either at home by mothers or sold in the streets and markets. In fact, most traditional gruels are too low, both in calories (approx. 40 kcal to 100 ml) and in proteins. Eating them may aggravate malnutrition, especially if these gruels are diluted.

The BAMiSA gruel is also an alternative to ready to use supplementary food distributed free by NGOs or international organizations. While their nutritional quality is

“perfect”, their use may aggravate dependence. Such high-tech free food products cannot remove the endemic causes of malnutrition.

One serving of BAMiSA gruel is 200 ml and its caloric value is 240 Kcal, which is the value recommended by the WHO-UNICEF (100-120 Kcal per 100 ml). The 1-2-3 recipe: one heaped volume of flour, two volumes of water, three pinches of malt and liquefaction of the thick hot gruel by means of amylase, achieves high protein and energy densities while retaining fluid consistency .

The BAMiSA flour naturally contains minerals and vitamins but is not fortified by the addition of industrial vitamin or mineral supplements. On the other hand, the gruel can be enriched by local sources of vitamins and minerals (fruit juice, red palm oil, moringa leaves, spirulina, milk ...)

For children who are deficient in vitamins and minerals, or run a high risk of becoming so, collaboration with Medical Services is necessary to provide pharmaceutical supplements without delay. In this way, any food deficiency will be cured faster and at a lower cost.

Daily consumption of high value protein-energy gruel is an effective way to improve the nutritional status of children and prevent malnutrition. Consumption twice daily can treat moderate malnutrition.

*Cf. www.bamisagora.org documents 5.a. « Caractéristiques et composition de la bouillie Bamisa » et 3.b. « La farine BAMiSA, fiche produit »

2.2 Nutritional Education information

In the long term Nutritional Education is the most effective method of combating endemic infantile malnutrition. Getting parents involved in health planning for their children, enabling them to become responsible for themselves and encouraging them to sensitise other parents, can create individual independence that is both **dynamic and self-sustaining**.

Nutritional education is effective if parents appropriate :

- The practice of breastfeeding, exclusively for the first 6 months and continued up to 2 years,
- The introduction of supplementary foods from 6 months, while maintaining breast feeding for as long as possible,
- The recipes of gruel made of a mix of cereals, legume and fats, cooked in specified proportions,
- The use of amylase to liquefy the gruel without diluting it so it will be of high protein-energy value,
- The diversification of food as soon as the child shows the ability to chew and swallow : animal protein, vegetables and fruit as local sources of vitamins and minerals,
- Hand and food hygiene and use of clean water.

The MBB allows mothers to see how a good gruel is prepared and then prepare it themselves with respect to the proportions of a heaped volume of flour to two volumes of water and attention to the way the gruel can be liquified. The final goal being that the 1.2.3. recipe ie.1 part flour, 2 parts water, 3 pinches of malt" is also eventually used at home since this recipe is valid for all cereal based gruels.

Preparing an individual BAMiSA gruel only takes a few minutes if a fire is lit. Preparing a collective gruel is a little longer as the gruel will have to cool a little before any malt is added.
The effectiveness of teaching will be greater by doing the following :
- Distribute the thick hot porridge in the bowl of each child and ask each mother to add the three pinches of malt herself. She will be able to watch the liquefaction of the gruel.
- Instead of malt, it is possible to ask mothers to put some of their milk or mix the gruel with a spoon moistened with her saliva.
This liquefaction is like a secret known to only a few women and it is important it should be shared by all, as part of the nutritional teaching.

To emphasize the interest of malt as an ingredient in the recipe, an MBB can be a distribution centre for the malt so that mothers can prepare amylased gruel back home. The possibility of using malt made in the area (to prepare local beer) can also be enhanced. It is possible to use malt from germinating maize, millet, white sorghum, paddy rice, wheat, and other germinated grains.

2.3 Public Health Information

Setting up an MBB requires the agreement of the Health Authorities and the place of installation will be determined in consultation with them. MBBs thus have their place in a local Public Health Project.

The measurement of Mid-Upper Arm Circumference (MUAC) is a simple way to assess the nutritional status of children aged 6 months to 5 years. This method is available to MBB support assistants who can thus identify children whose MUAC is below 13.5 cm and send them for treatment to the closest health center where they can be weighed and examined. During treatment and care for infection, digestive disorders, anemia, intestinal parasites, mineral or vitamin deficiencies ... the child will not be excluded from the MBB and if possible, will be given two servings of gruel daily.

The monitoring of children within an MBB can be useful to the health authorities especially outside vaccination periods when following up children is more difficult.

2.4 Social Aspect

Should an MBB welcome all children or only the children identified as malnourished?

A'' Maquis'' is open to all. The spirit of the MBB is ideally to accommodate all children between 6 months to 5 years, including those who do not show signs of malnutrition. Welcoming all children is the condition that allows MBBs to have a specifically preventive role. This open-to-all welcome avoids exclusion (of children who may become malnourished

or resume being so) and the stigmatization (of malnourished children and their families). In this respect, an MBB is different from a CRENA (Centre for the Rehabilitation and Nutritional Education of outpatients), which usually deals with malnourished children.

However, for budgeting reasons, the beneficiaries and locations will have to be defined in consultation with the stakeholders. Children with signs of malnutrition and children from troubled families identified by Social Services will continue to receive priority treatment.

In case of a serious food crisis, the MBB can be, for some time, a place where gruel, flour and food is distributed free.

NB The cost of treating severely malnourished children is high and generally call for agro-industrial products. Prevention of malnutrition is much cheaper, especially if it relies on local products. Paradoxically, more funds are mobilized by NGOs to treat severe and moderate malnutrition than to prevent its occurrence.

PART 2.

IMPLEMENTATION OF "MAQUIS BÉBÉS BAMiSA"

Maquis Bébés (MBBs) are designed as lightweight structures that can be locally managed at very low cost. Following this essential principle, several small structures close to populated areas, built by the people themselves for a specific period, are probably more effective than larger centralised and permanent structures that would be difficult to build and manage permanently or not.

MBBs can be initiated and developed either by local mothers themselves, or by a local association, a health centre, Social Services or even by the municipality. All the stakeholders need to agree on its development and construction.

Several steps need to be considered:

- Learning about national and local nutritional programs.
- Contacting local health authorities, existing Social Services and any other administrative groups that could help : mayors, municipal councillors, community councils.
- Learning about how the fight against malnutrition is locally conducted by other NGOs (Is there free distribution of food for children?)
- Finding ways to finance the initiatives.
- Appointing a group of women acting as voluntary community workers.
- Choosing the appropriate geographical location, its opening days and hours.
- Acquiring and/or borrowing the minimum, necessary equipment, such as chairs, benches, shelter, pots.
- Organising a source of supply of the BAMiSA flour and malt.
- Organising ways of managing and supervising the centres.

1. Relationship with Health and Social Services

Local Health and Social Services should be the first to be consulted in order to assess jointly whether the development of MBBs is appropriate in their area. These services would need to be involved in identifying the target populations, in deciding where to site the MBBs as a priority and in considering elements such as epidemiological data of malnutrition.

It will be necessary to plan the method of collaboration with the Health Services; should they become heavily involved, it might require the appointment of a health professional to do the weighing and follow-up sessions for the children. Conversely, it might mean simply authorising the local women community workers to measure Mid-Upper Arm Circumference (MUAC) and record the results in a health diary (after training for such a task).

The local Social Services should also be consulted, particularly in relation to targeting the children most at risk of major malnutrition.

2. Location, frequency and size of MBB

Whether in rural or urban areas, proximity between the MBB and beneficiaries will facilitate daily attendance in all seasons.

MBBs can be located in or near Health Centres, on a travel route, near a market, at a local charitable association centre or even at the home of one of the woman coordinators. The MBB concept can also be applied to displaced populations and sensitive urban areas.

To have quick, maximum nutritional impact, the MBBs need to be open at least once a day, 6 days a week. In certain situations it may be crucial to open twice a day for all 7 days of the week. The number, times and duration of sessions will need to be agreed upon among all the stakeholders and will need to be revised periodically depending on local conditions.

Consumption of the gruel will preferably be on site to ensure that mothers do not take it home to be eaten by others.

Other modes of distribution are of course possible, especially if the weather or local distances require it. If a mother works, she can ask someone else to feed her child.

As soon as the mother knows how to cook the gruel, a number of rations for x days or weeks can be given for her to prepare the gruel at home. Nutritional training sessions can then be spaced out.

It can also be useful to improve the diet of pregnant or lactating women according to the principle of "A bowl for the child and one for Mom". For those, as for older children, the gruel need not be liquefied.

To keep the possibility of nutritional education, the number of children in a MBB can hardly exceed thirty. If this number is larger, it is necessary to consider the possibility of opening another MBB.

3. The group of community workers

The formation of a group of women-community workers will be a determining factor in the success of a MBB. These women need to be convinced that the improvement of childhood nutrition contributes to the development of the community.

Whether they are members of an association or simply an informal group of mothers, they need to be prepared to take charge of the smooth running of the MBB, to accept the necessary training and to be willing to work virtually entirely voluntarily. They may be able to organise themselves so as to take turns after training.

After training * the women community workers will have :

3.1 An educational role

- Explaining to mothers that if a Bamisa gruel is the same price as market gruel, its nutritional value is 3 to 4 times higher.
- Teaching mothers to prepare the gruel according to the 1-2-3 recipe, as shown on the back of the BAMISA package.
- Advising mothers on good practice in terms of food and nutrition.
- Giving malt portions to the mothers who wish to try the 1-2-3 recipe at home.

3.2 A paramedical role

- They should be able to identify malnourished children by means of MUAC measurement and organize with health personnel the regular follow-up of the children's weight gains.

3.3 Responsibility for the management of the MBB

- Preparing the BAMiSA gruel daily, with the help of the mothers present; twelve to thirty portions should be readily available and ready to be consumed in situ.
- Keeping a notebook to record the number of portions distributed.
- Supplying the BAMISA flour for the MBB after ordering it from the UPA (local community production unit).**
- Organising the supply of flour, water and firewood.
- Teaching mothers how to prepare the BAMiSA gruel, so that they too can prepare the high density gruel on their own, at home.
- Keeping the MBB equipment safe
- Selling bags of BAMiSA flour is a possibility.

*This paragraph constitutes to some extent the training programme. Training will be obtained from an MBB that is already in operation or from the UPA providing flour

**The flour can be paid by the partner directly to the UPA providing the flour

4 Acquiring the equipment

The equipment required is very simple. It could be supplied, given or lent, by communities where the MBB is operating. If the equipment need be completed by some purchases, a budget will have to be drawn up.

Daily preparation and distribution will require:

- Water and soap for washing hands and utensils.
- Water for the gruel,
- Firewood with one or more small mobile cooker.
- A large cooking pot for preparing communal portions of gruel, a large container to mix the flour and water, a ladle (200ml) or very large spoon to stir the gruel and distribute it.
- A jug for the measurement of flour and water quantities, in volumes. The bamisa bag could be used by filling it twice to the level of the volume of flour.
- Some bowls and spoons to lend to the mothers who don't have any. Bowls could be given to the mothers who attend the MBB regularly. Bowls should be cleaned and returned to the MBB the next morning.
- A stock of BAMiSA bags stored in well-sealed containers.
- A small extra quantity of malt for training and distribution purposes.
- Some seats or benches where mothers can sit down.
- Some notebooks.

Demonstration of individual portion preparation will require:

- A small saucepan or cooking pot.
- A small stove
- A 100ml glass or goblet as a measuring jug.
- A bag of BAMiSA flour with malt

Measuring MUAC and weighing children will require :

- A tape to measure MUAC. (One seamstress tape or a specific tape) MUAC over 13,5 cm (Green colour) indicates that the child is not undernourished.
- Scales (usually available from a Health Centre)
- A notebook and pens/biros

Running the MBB will require :

- A table, a mat, a parasol or shelter against the sun and/or rain.

5 Sources of BAMiSA flour

- The flour will be provided by the nearest BAMiSA UPA*.
- If the above isn't possible, if there is no BAMiSA UPA in the area then it should be possible for the MBB to associate with a local production unit in order to prepare the flour.**

* cf. www.bamisagora.org Chapter 2.a "List of UPA and GFC Bamisa").
** cf. www.bamisagora.org Chapter 3.d. "Community production and preparation at home.

6 Financing

The Management of an MBB is based on the principle of **partial cost recovery,** on the one hand and on **subsidies** on the other.

MBBs are by definition located in suffering economic areas and it is the poorest families who run the highest risks of under-nutrition. It should be appropriate not to penalize the families who cannot contribute to the costs. To allow the children **priority access** to the gruel, it may be necessary to provide additional funding.

Suggested management method:
The cost of a bowl of gruel (200 ml) in an MBB is estimated at 100 CFA francs.
It is sold at the same price as a bowl of gruel in the market, for example 25 FCFA.
These 25 FCFA will be the MBB's revenue. This revenue will cover the operating costs of the MBB. Firewood, telephone, transport of the flour and possible transport of the community workers, ...)
A financial partner will have to finance the necessary flour (60 g) for each bowl of gruel, that is to say 75 FCFA.
Other management modes can be applied, particularly as regards the proportion of cash flow.

7 Follow-up / Evaluation / Duration

MBBs need to remain in close contact with the UPA that supplies them with the flour and also with other MBBs in their area. Continuous follow-up* will allow for the guidance of the activities of the community workers and will ensure that the MBBs comply with the objectives of the local Health and Social Services and, of course with those of their partners.

The benefits of the MBB's attendance will be assessed by MUAC measurements, by recording the children's weight gains, and acknowledgement of longer spans between bouts of illnesses. Such anthropometric data will remain available to the health services.

The MBB will be funded for a fixed term and renewable for a period ranging from several months to a few years. Funding will be subject to an agreement between the financial partner on the one hand and the representatives of the local legal framework, who are entitled to funding, on the other.

*The follow up will be done by a person authorized by the partner organization that funds the MBB.

8 Budgets for implementing a *Maquis Bébé BAMiSA* *

The financing for setting up an MBB needs to remain low.
The flour purchase budget will represent the bulk of the funding.

*cf. www.bamisagora.org Chapter 10.c "Budget for implementing a Maquis Bébé BAMiSA"

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