

**Evaluation of the WHO Africa  
Regional Programme on Noma Control  
(2013-2017)**



**EXECUTIVE SUMMARY**

**Commissioned by WHO AFRO**

**January 12, 2019**

## Acknowledgements

Photo credit: WHO/Julie Pudlowski, NGO Hilfsaktion Noma e.V., Professor Sudeshni Naidoo, Dr. Dimba Elizabeth, Dr. Benoit Varenne, Professor Emmanuel Crezoit, Dr. Lassara Zala, Dr. Will Rodgers, Dr. Priscilla Benner and Dr Adeniyi Semiyu Adetunji

Noma Program: Dr. Prebo Barango, Regional Noma Control Program Manager; Dr. Benoit Varenne Dental Officer/ NCDs -HQ Geneva; Noma Country Focal Points (Senegal, Benin, Togo, Mali, Guinea Bissau, Burkina Faso, Côte d'Ivoire), Partners (Ministries of Health, other NGOs)

PBM Office: Awa Mangie Achu Samba, M&E Officer- WHO AFRO

Evaluation Team: T. Blewussi Koffi, PhD (c); T. Yano Inrombe, DMD, MPH; and Charles Asabere, PhD©

## Executive Summary

*"This is a great advantage and opportunity for the programme. In the absence of funding now, these local associations allow me to know what is happening in the field and report to me on the cases and difficulties encountered." National Noma Focal Point, Mali MoH.*

### Background and Context

Noma is a necrotizing disease that destroys the mouth and face. It affects mostly children between the ages of 2 and 6 years. Noma is a result of complex interactions in immunosuppressed children living in extreme poverty. In addition to known factors such as malnutrition, coinfections with measles and malaria and poor oral hygiene, several social and environmental factors such as maternal malnutrition and closely-spaced pregnancies that result in offspring with increasingly weakened immune systems, could be strongly related to the onset of the disease.

Without prompt treatment, as much as 90% of patients die of sepsis or severe dehydration and malnutrition within two weeks of the onset of Noma. Survivors of the acute phase are left with severe facial disfigurement, have difficulty eating and speaking and face social stigma and isolation. Owing to the rapid progression of the disease and the high mortality rate associated with its acute phase, numerous cases of Noma remain undetected. The great majority of affected communities in Africa are situated in peri-urban and rural areas where access to care is difficult and traditional beliefs and stigma are often prevalent.

An evaluation of the Regional Noma program (2013 - 2017) was carried out from September – December 2018. It was a time to review the past phases of the Noma program and the process of implementation of the Noma project to inform mid-course corrections towards newer phases of the program implementation.

### Understanding WHO Africa Regional Noma Project

The World Health Organization Regional Office for Africa (WHO AFRO), with the support of WHO Country Offices, has been coordinating the development, implementation and monitoring and evaluation of Noma National Action Plans in 10 countries which include: Niger, Nigeria, Burkina Faso, Benin, Democratic Republic of Congo (RDC), Mali, Senegal, Guinea Bissau, Togo and Côte d'Ivoire. In 1994, the World Health Organization (WHO) declared that Noma was a public health problem, and recognized Noma as a global disease, affecting mainly Africa and afflicting children aged between 0-6 years. In 1998, WHO estimated the overall incidence of Noma at over 140,000 cases a year, with a mortality rate of between 80% and 90%.<sup>1</sup> The WHO's strategy for tackling and controlling the disease in the region, AFRO developed a five-point strategy<sup>2</sup> which involves:

- Prevention - Setting up information and education programmes to make parents, especially mothers and pregnant women, aware of the signs of noma and the urgent need to act on it;
- Training - Training primary health care workers: in early detection of the disease and providing immediate care;
- Epidemiology and surveillance -Including noma in existing epidemiological surveillance systems;
- Etiological research - Promoting research to find out just how noma is caused;
- Primary health and Rehabilitative surgery.

Winds of Hope supported AFRO from 2003 - 2012. Winds of Hope support during the period was based on the AFRO 5-point strategy outlined above. In 2003, the Winds of Hope Foundation signed a

---

<sup>1</sup> WHO 1998 Noma Report

<sup>2</sup> <https://afro.who.int/news/winds-hope-supports-fight-against-noma>

5-year partnership (renewed in 2010) with the World Health Organization's Regional Office for Africa (WHO/AFRO) to finance national programs for the fight against Noma in six West African countries (Senegal, Mali, Burkina Faso, Niger, Benin and Togo).

Since 2013, the Regional Noma Program has been supported by Hilfsaktion Noma e.V. – a German NGO dedicated to the eradication and control of Noma. Through this support, the countries in the program were expanded to ten (10) countries. The countries are at various stages of the development and implementation of their respective triennial Noma action plans. The three-year planning cycle is aimed to enhance efficiency in the execution of the plans as well as to promote intersectoral strategies based on the decentralization of interventions. The purpose of the action plans developed by the countries is to foster best practices in the planning and implementation of activities and for effective decision-making all through the planning and implementation phase, including monitoring and evaluation. The key objectives of the agreement were:

- To strengthen the capacity of WHO Regional Office to coordinate Noma prevention and control activities across the African region;
- To support the development and implementation of the national action plans for the prevention and control of Noma in affected countries.

#### Key Noma Milestones

- 1992 - WHO Noma Control Plan is developed.
- 1994 - Noma is declared a public health problem by the WHO.
- 1998 - Identification of Noma as one of the priorities of the Regional Strategy for Oral Health for Africa : 1999 – 2008.
- 2001 – Development of the Regional Noma Control Programme (RNCP) at the WHO Africa Regional Office in Brazzaville.
- 2003 - Signing of the first Cooperation Agreement between the Winds of Hope Foundation and the WHO Regional Office for Africa.
- 2007 - Consideration of Noma in Resolution WHA60.17 on Oral Health adopted at the Sixtieth World Health Assembly.
- 2008 - The International Noma Day, which brought together technical and financial actors and partners in Geneva, was declared.
- 2010 - the RNCP is relaunched in 6 countries and Winds of Hope becomes the main partner of the program.
- 2012 - UN Human Rights Council initiative "Human Rights Principles and Guidelines to improve the protection of children at risk or affected by malnutrition or affected by Noma" was declared.
- 2013 – Noma Inter Country meeting in Senegal.
- 2013- Hilfsaktion Noma e.V. becomes the main partner of the RNCP.
- 2014 - Guinea Bissau and Côte d'Ivoire join the RNCP.
- 2015 – Noma Inter Country meeting in Abidjan, Côte d'Ivoire.
- 2016 - Publication of the Oral Health Promotion Manual and a new regional oral health strategy for the WHO Africa region.
- 2016 - DRC and Nigeria join the RNCP.
- 2016 –Publication of the “Information brochure for early detection and management of noma” including a new classification of the stages of the disease was done.
- 2016 – Noma Inter Country meeting in Ouagadougou, Burkina-Faso.
- 2017 – Noma Inter Country meeting in Brazzaville, Congo.
- 2018- Evaluation of the Regional Noma Control Program 2013 -2017.
- 2018 – Noma Inter-Country meeting in Bissau, Guinea Bissau. More funding committed by Hilfsaktion.
- 2018- Initiative for fundamental research and systematic review on Noma by WHO Oral Health Programme.

## Purpose and objectives of the evaluation

The findings and recommendations from the evaluation will inform the maintenance, continuity and scalability of the Noma Programme in the region. The evaluation will provide lessons and answer questions related to the effectiveness and efficiency of the project and its outcomes. It will also inform further design and implementation of the Programme for Noma control in the WHO African Region. At the global level, the evaluation will contribute towards strengthening knowledge management on the successes and challenges of this approach in different regions. The evaluation will look at the project achievements, results and indicators. The main audience of the evaluation is the AFRO PBM Office, Noma Program Manager, Non-Communicable Diseases (NCD) Cluster Director, Country Managers of the Noma Program and Hilfsaktion Noma e.V., among others.

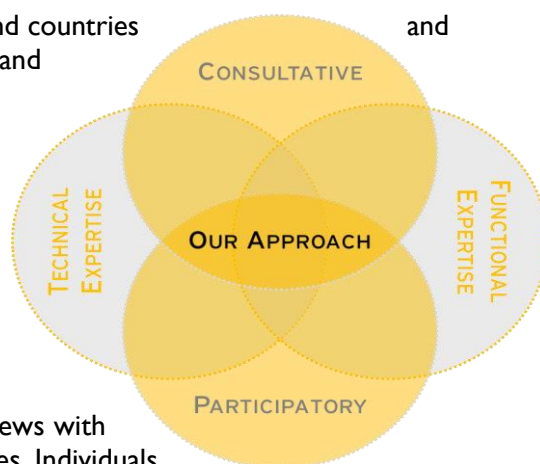
## Scope and Approach of the Evaluation

The evaluation covered the period from 2013-2017. The evaluation used a mixed approach and tried to bring out best practices, recommendations, lessons learned, gaps and possible modifications which could be made to the future Noma interventions. The evaluation covered all ten (10) of the countries. Seven of the 10 RNCP beneficiary countries were visited by the evaluation team: Togo, Guinea Bissau, Nigeria, Senegal, Mali, Burkina Faso and Benin for field data collection. Niger and the Regional Office interviews were done online as well as during the Bissau meeting.

Sampling was randomized among the project beneficiaries<sup>3</sup> and countries proportionally distributed. The evaluation utilized qualitative and quantitative methods of data collection (Surveys, KIs and Document Review).

Data collection methods included the following:

- Secondary data: Included the review of documents including annual reports, donor reports, project proposal and agreements, which provided empirical evidence when assessing the programme across countries.
- Primary data collection: comprised key informant interviews with key stakeholders at the Regional Office and country offices. Individuals interviewed included Project Manager, Noma Focal Points, Cluster Director of NCDs Country, PBM, Ministry of Health, Health workers, National Dental Associations, Nutrition Programme, Child Health Programme, Immunization programme, National Health Monitoring Systems and Hilfsaktion Noma e.V.



## Evaluation Questions and Criteria

The evaluation tried to address the following illustrative evaluation questions to inform the data collection tools:

- How has Noma Programme performed against the programme indicators (analysis of monitoring data and program indicators)?
- Which high impact/best practices (HIPs/BPs) have Noma advanced? The team will consider the following:
  - What policies, norms, guidelines, protocols, etc. related to the selected HIPs have been advanced?
- How is the WHO AFRO office coordinating the development, implementation and monitoring and evaluation of national action plans in the ten countries?

<sup>3</sup> Includes communities and health workers

The evaluation answered other questions contained in the evaluation matrix as well as utilized the evaluation criteria set by the WHO Evaluation Handbook. The criteria for this evaluation are as follow:

### Evaluation Criteria

Criteria	Question
<b>Relevance</b>	<ul style="list-style-type: none"> <li>• Are the activities and outputs of the programme still valid?</li> <li>• Are the activities and outputs of the programme consistent with the intended impact and effects?</li> <li>• Country triennial action plans are in line with the Regional Noma Control Program?</li> </ul>
<b>Efficiency</b>	<ul style="list-style-type: none"> <li>• Where the activities cost efficient?</li> <li>• Was the programme implemented in the most efficient manner?</li> <li>• Were the programme objectives achieved on time?</li> </ul>
<b>Effectiveness</b>	<ul style="list-style-type: none"> <li>• Did the programme achieve its objectives or are the objectives likely to be achieved?</li> <li>• Did the programme achieve its objectives or are the objectives likely to be achieved?</li> <li>• What were the major factors that influenced the achievements or non-achievements of the objectives.</li> </ul>
<b>Interim Outcome</b>	<ul style="list-style-type: none"> <li>• What real difference did the programme make to the beneficiaries?</li> <li>• Did the effect/change come because of the programme?</li> <li>• How many people were reached?</li> </ul>
<b>Equity</b>	<ul style="list-style-type: none"> <li>• Have the principles of gender equality, human rights and equity been applied throughout the intervention?</li> <li>• Were Human Rights and Gender Equality issues were integrated into the design, planning and implementation of the programme?</li> </ul>

### Evaluation Process and Technical Approaches

The AFRO PBM unit provided guidance, coordinated and contributed directly to quality assurance activities. The unit served as a liaison between the evaluators and the program. PBM supported the evaluation team by providing relevant documentation, arranging meetings, writing letters of instructions among others. PBM facilitated and coordinated meetings and interviews for the team as well as assessed the quality of key evaluation products, including methodology and evaluation instruments, inception and final reports. The evaluation was completed in three phases:

**Phase 1: Inception:** Conducted a partial desk review and preliminary mapping and discussions/interviews with key stakeholders and preparation of draft workplan, questionnaire and key indicators. Project documentation was not readily available until after data collection.

**Phase 2: Data Collection:** Visited the target countries and conducted field data collection and interviews. Conducted remote interviews and data collection where possible.

**Phase 3: Analysis and report writing:** A draft of the evaluation report based on initial findings was submitted and the comments and feedback will be incorporated and finalized.

The data for the evaluation was collected through Document Reviews, Surveys and Key Informant Interviews (KIIs).

### Sample Size

The team used random sampling methods to select program beneficiaries (Health workers, community health workers, community members and community actors as they become known. In total, **164** interviews were conducted.

## Challenges

The availability of documents at both regional and country levels was a key challenge. Some documents necessary for analysis could not be provided on time for literature review by the project management. Additionally, there is inadequacy of important data in the documents produced by the countries. This did not allow for some analysis to be done.

Other challenges included:

- The evaluation could not cover all 10 beneficiary countries, DRC and Côte d'Ivoire did not respond to invitations for online interviews. Nigeria did not provide the requested documents. Senegal, Mali, Benin, Togo and WHO AFRO did not provide all the documents on the list for document review. Gathering the documents for literature review was a challenge for this evaluation.
- Meeting the beneficiaries<sup>4</sup> of the Programme was difficult because the national programmes have done most of the training and awareness in the districts. It was difficult for the team to physically go to the districts within timeframe and budget allocated for the evaluation.
- Some of the Key Informants were not available. As a result, the interviews could not be completed on time according to the scheduled dates. Nevertheless, the evaluation team was able to meet with a large proportion of the key informants by doing some interviews remotely.
- Most of the Interviewees were not too comfortable during the interviews. For some, it is because they were not really involved with the Noma Programme though they have the responsibilities. For other interviewees, it is the lack of an evaluation culture. They were afraid that the evaluation will make judgement about their work and they answered a few questions with limitations.

## **Key Findings**

Evaluation findings are presented terms of operational results (relevance, effectiveness, efficiency, effectiveness, sustainability and added value) and programmatic results (coordination mechanism, monitoring and evaluation system).

### Relevance

The Regional Noma Control Programme, by its regional nature, responds primarily to the need for inter-country control of the disease. Although the number of cases does not equal the level of other diseases in the countries, the relevance of the program is perceived by considering its prevention approach. The country action plans are generally aligned with the health policies in the various countries and are particularly integrated with the NCDs. The countries have significant risk factors: high poverty rates, a nutritional situation marked by the prevalence of acute and chronic malnutrition and anaemia. The epidemiological profile of the disease show that cases of Noma have been reported for years in these countries. The data collected in the documents of some countries shows that in

- ✓ Niger, 1034 cases were recorded between 2004 - 2013,
- ✓ Benin, 88 cases were recorded between 2014 - 2015,
- ✓ Togo, 304 cases were recorded between 2006 - 2018,
- ✓ Senegal, 113 cases were recorded between 2000 - 2016,
- ✓ Mali, 239 cases were recorded between 1992 - 2013 and
- ✓ Guinea Bissau, 195 cases were recorded between 2007 - 2017.

There is a general lack of knowledge about Noma by doctors, public health and policy development officials. The general population still associates Noma with a curse or witchcraft. Capacity building for disease detection and prevention needs to be intensified for community health actors and the population. The focus needs to be on building the capacity of health and community actors, awareness

---

<sup>4</sup> Health workers, community actors, community members and community health workers

raising, surveillance and monitoring and evaluation. The RNCP addresses the needs of countries and beneficiaries in the fight against Noma where many malnourished and at-risk children aged 2 - 6 still live. Some stakeholders believe that the problems continue to exist as none of the countries have reached zero cases of Noma. Nonetheless, the programme can be improved to consider socio-nutritional behaviours. The Noma program will have to utilize existing structures and the community health workers to reach the community easier. It should consider socio-behavioural aspects, develop participatory approaches of monitoring and evaluation in the planning cycle and give more interest to research on Noma.

### Effectiveness

The effectiveness of the RNCP has been measured based on the implementation of the action plans of the countries from 2013 - 2017, as well as the support provided by the WHO Regional Office. The review was based on the activities only because of the limitation in monitoring data and project log frame. The programme interventions have had some immediate effects at the country level. Some immediate changes that were mentioned by key informants include:

- Development and Integration of policies on Noma into National Health policies through the Oral Health and disease surveillance programs. *"In recent years, the Ministry of Health has integrated the Noma program into its medical vision, since Noma has become an event-declared disease in the SMIR guide. This was not happening previously, and it signals a clear desire to take Noma into account in the medical system. Nowadays, as soon as there is a Noma case, it is reported monthly, quarterly and bi-annually whereas before the Noma cases were only reported at the end of 12 months for the MoH annual surveillance reports."* National Noma Focal Point, Togo.
- The awareness of Noma as a disease has increased. Key informants noted that there needs to be a national plan to mobilize resource for the fight against Noma. The governments could strengthen oral health programs including Noma. *"We also need local resource mobilization because we cannot continue to wait for a project to finance our activities. We do not have the solution, but the country must be able to see how to mobilize resources locally or at least include it in the State budget. It would cost only a small amount of its budget to make oral health program stronger and raise Noma awareness for the sustainability of the achievements"*. Oral Health Focal Point, Burkina Faso.
- The changes in Noma control policy influenced by the RNCP in the countries are tangible through the willingness of the stakeholders to achieve the objectives of the program. This includes the implementation of activities such as: a) training of CHWs and health professionals, 2) awareness raising by the community workers has allowed the affected population and other health professionals to know the disease. A key informant in Mali said, *"Yes, I think that since the project started, we feel that there has been a much greater focus on Noma. Because the country knows that there is support available, there is a possibility of being accompanied to carry out activities, so we feel a little more involved. We feel the willingness of WHO to support the MoH, but a key challenge is the collection of information on the disease."*
- Created a connection between oral and other health profession (Nutritionists, Paediatricians, Surgeons). It also created a linkage between the two groups and the WHO Country teams. This is rare as most health programs in Africa focus on health areas other than oral health.
- Noma has been effectively introduced and integrated into the curriculum of the medical and other health professionals' schools in Mali, Burkina Faso and Niger. This will strengthen the fight against Noma in these countries as they strive to reach zero Noma cases. As one University Professor in Burkina Faso explained: *"Noma has a big chapter to teach the students. There are lessons to be taught and these lessons are contained in a large module which is broken into subsections. These courses have objectives that allow students to take charge of Noma within the Burkinabe context"*.
- Improving the identification of Noma cases by health workers and communities. In all the countries, health workers and the CHWs trained in case detection and management were satisfied. The medical students and other health professionals interviewed were also satisfied with the trainings received. Despite this, the regional program did not have a curative component and



did not establish linkages with those team and institutions carrying out reconstructive surgeries.

- Through the RNCP, collaboration between local NGOs and Ministries of Health has increased and more productive in terms of community mobilization and improving people's knowledge of the disease. Burkina Faso, Benin and Mali often organize coordination meetings with the local NGOs to plan activities for Noma prevention. A local NGO official said: *"With regards to the Ministry of Health, there is a commitment from us to fight Noma. NGOs working on Noma such as-Sentinels and The End of Hope- are looking forward to more collaborative opportunities with the MoH. There are many other community-based organizations working in the fight against Noma. I believe that the Ministry of Health and its partner associations have the same vision for the care of the Noma patient now due to the attention the RNCP brought to the disease"*.

### **Factors affecting Achievements**

Overall, countries presented several factors that contributed to the implementation of the Noma program. Some of these factors were successful while other were not. Some factors affecting implementation include:

- The vision, political engagement and dynamism of the actors of the MoH in some countries such as Burkina Faso, Senegal and Nigeria has led to stronger Noma programs.
- The availability of competent human resources - The MoH supported the programme by making health personnel and logistics available. This was a key component for the implementation of the program.
- The training of community health workers and traditional practitioners has encouraged the acceptance and massive involvement of communities.
- The number of civil society organizations actively involved in Noma prevention and coordination with the MoH in Mali, Burkina Faso, Senegal and Benin, have facilitated the implementation of certain activities such as case monitoring, the identification of community leaders and the training of certain field workers.
- The integration of the program planning process at the national level, specifically in Burkina Faso. The current guidelines of the Division of NCDs in Burkina Faso. The Director said, *"Noma has been placed in the guidelines, we do not need to go to negotiations to say that we want to do this, all partners see it as part of our work because it is integrated into the national planning system. This is very positive because some other diseases are not yet in the guidelines."*
- RNCP funding coupled with the technical support received have made it possible to work on Noma and increased the number of institutions concentrating on the fight against Noma.
- The satisfaction of health personnel and communities in being able to diagnose and manage Noma have been a key factor. Noma had remained to date a mystery (labelled as curse, witchcraft or voodoo). The RNCP has enabled them to understand and know Noma. The RNCP has also trained them to help their communities in obtaining care and prevention techniques. *"In villages before the RNCP, a child with Noma could not live or come outside, the hide and avoided others. We the nurses had suspicions of witchcraft when we saw Noma cases. Today, with the training we are more motivated to change things, especially at the community level. MoH Nurse – Togo.*

### **Regional office support to countries**

With funding from Hilfsaktion Noma e.V., ten countries have received support from the Regional Noma Control Programme (RNCP) to develop their three-year plans. During 2013, countries benefited from a planning framework that met their needs and those of WHO, as well as guidelines to support the development of their plans 2013-2017, which have been validated in each country. In line with its commitment under the RNCP, the WHO Regional Office has had to finalize a guide for the preparation of three-year plans, strengthen collaboration with other health programs, and facilitate the integration of other countries such as the DRC, Nigeria, Côte d'Ivoire and Guinea Bissau into the programme.

In addition, technical support marked by country visits was provided by the regional office for the finalization of the action plans and their validation. The action plans were not validated in a timely manner as there were delays in the validation of the action plans for Benin, Guinea Bissau, Togo, Mali, Nigeria, Burkina Faso and Côte d'Ivoire. All plans were expected to be validated by December 2013, but 70% of the plans were validated in 2015. This delayed the implementation of Noma control activities in the respective countries. Programme support also included assistance to countries in monitoring the implementation of the action plans; organization of inter-country workshops for the exchange of experiences, harmonization of intervention strategies, and review of activities carried out within the framework of the national action plans.

WHO's support for monitoring and evaluation in the country is provided through the exchange of guidelines and standards, training materials, monitoring reporting template and support for the development of action plans. The IST team also supported the review of the implementation of Benin's 2015- 2017 action plan. However, there is a lack of a clear framework for monitoring, evaluation and technical support to the country. The IST could play this role in order to support the countries in the different phases of the project. The IST only works with countries after they have been approached by them and most of the countries do not know or understand the role of the IST.

Four (4) interregional workshops were held in Abidjan (2015), Ouagadougou (2016), Brazzaville (2017) and Bissau (2018). While these annual workshops have been opportunities for all programme stakeholders to meet and discuss challenges, the evaluation finds that these workshops are not really being used to improve the framework for reporting results and compiling databases. The reports presented by countries during the workshops generally lack rigour in terms of presenting viable results and rigorous measurement of indicators. Overall, the documents presented during the workshops are laconic and are not results-based. Moreover, the summaries do not provide an overall level of implementation and performance measurement. The objective of the inter-regional workshops must therefore be reviewed and improved.

### **Level of implementation of action plans**

In the period covered by the evaluation (2013-2017), five countries (Senegal, Benin, Burkina Faso, Niger and Mali) have completed the implementation of the 2015-2017 plan, while Togo, Nigeria, Côte d'Ivoire, Guinea Bissau and DRC are still in the process of implementing their plans at the time of the evaluation. These countries started their activities late due to the delay in the development and validation of their action plans.

### **Different categories of country in implementation**

**Category 1:** Countries that have completed the implementation of their first three-year plan 2015-2017

- Burkina Faso
- Senegal
- Mali
- Benin
- Niger

**Category 2:** Countries in the process of implementing their first three-year plan at the time of the evaluation

- Democratic Republic of Congo
- Nigeria
- Côte d'Ivoire
- Guinea Bisau
- Togo

Each country had a copy of the action plan writing guide, made available by the WHO regional office. This ensured that there was harmonization in the action plans. The actions plans developed and implemented by countries were not contextualized per country.

All the action plans had six objectives, which are:

- (i) Strengthening and developing the capacities of social and health personnel,
- (ii) Strengthening and developing capacities at the community level,
- (iii) Raising awareness and social mobilization,
- (iv) Developing training, education and awareness materials,
- (v) Epidemiological surveillance,

(vi) Programme coordination and monitoring.

Efficiency

Data from the WHO Regional Office indicate that over the period 2010-2022, a total amount of \$5,314,238 was mobilized to support Noma control activities until 2022. The amount raised to cover activities over the period evaluated (2013 - 2017) was \$3,469,238 (65% of total funds raised). The table below shows the total funding and sources for the fight against Noma.

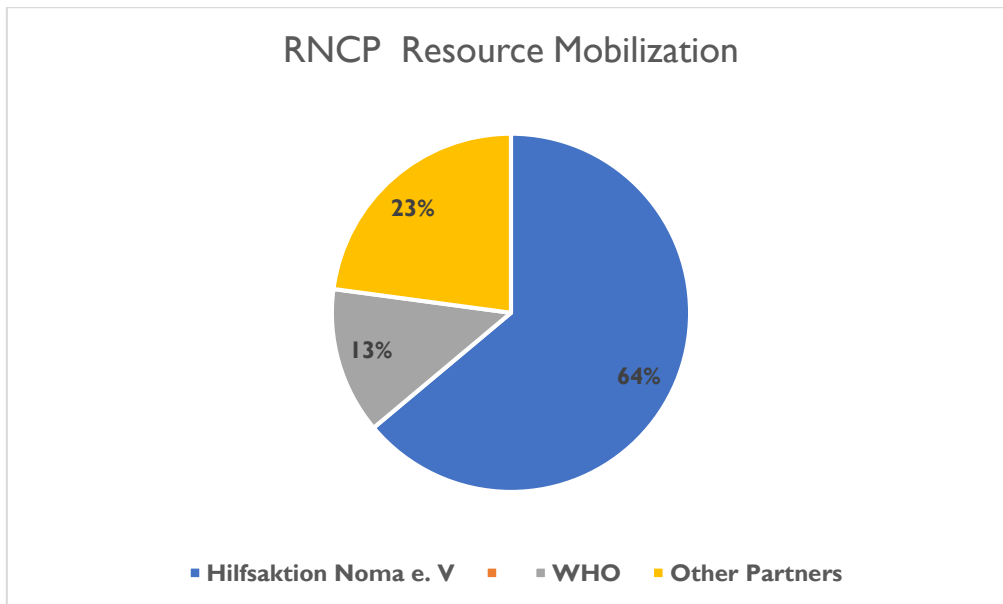
**Funding for Noma per year (in USD): 2010-2022**

Partners	2010-2012	2011-2012	2012-2015	2014-2016	2015-2019	2018-2022	Total
Hilfsaktion Noma e. V		\$228,000	\$71,190	\$276,000	\$976,000	\$1,845,000	\$3,396,190
WHO		\$77,000		\$204,420	\$420,900		\$702,320
Other Partners	\$1,215,728						\$1,215,728
<b>TOTAL</b>	<b>\$1,215,728</b>	<b>\$305,000</b>	<b>\$71,190</b>	<b>\$480,420</b>	<b>\$1,396,900</b>	<b>\$1,845,000</b>	<b>\$5,314,238</b>

Source: WHO Regional Office, Finance presentation at Noma Meeting- Bissau 2018

Hilfsaktion contribution represent 64% of the total amount received to fight against Noma from 2010-2017. WHO's resource mobilization for Noma capacity has increased, especially with the inclusion of Guinea Bissau, Côte d'Ivoire (2014), DRC and Nigeria (2016) in the Regional Noma Control Programme.

**RNCP Resource Mobilization: 2010- 2017**



Source: WHO Regional Office, Finance presentation at Noma Meeting- Bissau 2018

Niger and Benin have received the most funds under the Noma programme between 2010 and 2018 for the implementation of Noma control activities. Niger have received \$383,163 while Benin have received \$255,105. The DRC, Mali, Guinea Bissau, Nigeria and Togo received the lowest funds for Noma.

## Sustainability

The institutional mechanism of the Regional Noma Control Programme anchored in the MoH and under the direct supervision of the WHO Country office, is likely to promote the institutionalization and ownership of the programme by the Ministries of Health.

The development, validation and dissemination of strategic documents and manuals for the management of diseases mentioning Noma (characteristics and treatment) is a programme product that reinforces the ownership of this fight against Noma by the health authorities in the countries. In Mali, Nigeria and Togo, this process is currently being validated while in Senegal and Burkina Faso, this has already been completed.

Governments must allocate funds to oral health programmes. This will enable Noma to have some sort of funding in the absence of WHO funding. In Senegal, there have been some extra funds put into the programme. In Senegal, the Noma programme has focal points in the health districts. It is an approach that tends to promote the sustainability of the programme and above all its ownership by all stakeholders by involving them at different levels.

Collaboration amongst stakeholders such as local and international organizations is also one of the factors in the sustainability of the Noma programme. In Mali, collaboration with the various Noma actors present in the field encouraged and strengthened actions in the field. This strategy is well advanced in Niger and Benin with the signing of contracts with local NGOs. This ensures that the gains made by the programme is maintained within the country. Nigeria has also started its activities by integrating the various stakeholders (Nutrition Programme, Immunization programme, Child Monitoring Programme, Maternal Care Health programme, and Community Health Programme) and involving them in the trainings from the start of the implementation. Similarly, collaboration between the various programmes in the countries would be an asset for sustainability and will be beneficial in terms of patient care.

## Interim Outcomes

The implementation of activities to reach the program objectives is the aim of the program. As at the time of the evaluation, the implementation of the activities in the countries are at the stages below:

- Objective 1- strengthening and development of the capacities of social and health personnel: 10 countries (Niger, Cote D Ivoire, Guinea Bissau, Nigeria, Togo, Senegal, Burkina Faso, Democratic Republic of Congo, Benin and Mali) have developed and implemented activities under objective 1.
- Objective 2 – Community Health Workers – 6 countries (Togo, Senegal, Burkina Faso, Democratic Republic of Congo, Benin and Mali) have worked with community health workers on Noma while 4 countries (Niger, Cote d'Ivoire, Guinea Bissau, Nigeria) have not conducted any activity under the objective.
- Objective 3 - Awareness and social mobilization – 7 countries (Niger, Nigeria, Togo, Senegal, Burkina Faso, Benin and Mali) have completed some activities while 3 countries (Côte D' Ivoire, Guinea Bissau, and Democratic Republic of Congo) have not conducted any activity.
- Objective 4 – IEC and training materials- 8 countries (Niger, Cote D Ivoire, Togo, Senegal, Burkina Faso, Democratic Republic of Congo, Benin and Mali) have implemented activities under this objective while 2 countries (Nigeria and Guinea Bissau) are in the process of implementation.
- Objective 5 - Epidemiological surveillance - 7 countries (Togo, Senegal, Burkina Faso, Benin, Cote D' Ivoire, Niger and Mali) have conducted epidemiological surveillance while 3 countries (Benin, Nigeria, Democratic Republic of Congo) have not conducted any activity under the objective.
- Objective 6 - Coordination and monitoring programme – 6 countries (Togo, Senegal, Burkina Faso, Niger, and Mali) have conducted coordination and monitoring activities while 4 countries (Benin, Nigeria, Democratic Republic of Congo and Cote D'Ivoire) have not conducted any activity under the objective.

The factors that hinder the achievement of activities and objectives are diverse and vary from one country to another. Some factors that were identified include:

- The slow processing of requests and disbursements of funds at the WHO Country Office. Many WHO Noma country focal points confirm this and explained that it is due to the lack of time and their workloads as they have many programmes they are managing at the same time.
- The NNCP does not process the invoices properly and this leads to delays in finalizing them for payments
- The current implementation of the actions plans have mostly lasted 1.5 or 2 years instead of 3 years. This is because there needs to be a rethink of the 3-year plans because in almost all the countries the implementation of the activities based on the budgets so far have lasted 1.5 or 2 years instead of the complete 3 years.
- The requests from the MoH for funds have been of poor quality and remains an obstacle. It results in a lot of back and forth between the MoH and WHO and slows down the momentum gained in implementing activities.
- The status of some countries where CFL is applied for non-accountability of funds is another factor that hindered the implementation of activities.

### Coordination and Leadership

The coordination framework for the Regional Noma Programme is defined in the project documents and is organized around the development of three-year action plans, monitoring of action plan activities and reporting. This framework provides for the support of the regional office through the country offices to the MoH. For example, WHO coordinated the development of three-year action plans for the 10 National Noma Programmes by providing guidance documents. The guide is intended for the national oral health coordinators of the Ministries of Health. The guide enabled each country to analyse the situation based on a set of indicators relating to the priorities and needs of the country.

During the implementation of the action plans, coordination activities at the regional level included the finalization in 2014 and the launch in 2015 of three important WHO documents with the support of the Hilfsaktion Noma e.V.:

- Policy document on Oral Health, NCDs (Regional oral health strategy 2016–2025: addressing oral diseases as part of non-communicable diseases for the African Region including a specific section on Noma prevention and control);
- WHO Technical Manual (Improving Oral Health in Africa - Oral diseases and Noma part of essential NCD's interventions) and
- Information Brochure for Early Detection and Management of Noma

Coordination at the regional level consisted of organizing annual meetings of stakeholders from the countries to review the implementation of action plans and define new actions. At the country level, the implementation of the action plan by MoH is marked by the support of the WHO country team in the development and finalization of triennial and annual action plans.

### Monitoring and Evaluation

The monitoring and evaluation framework of the Noma Programme includes activities to be carried out at several levels to ensure accountability for the implementation of action plans. This mechanism includes a set of bodies from the regional and country level to monitor and evaluate the implementation of the action plans. Monitoring of the programme at the Ministries of Health was planned by the WHO offices. Limited technical support was received from WHO for the monitoring of the activities of the MoH. Monitoring activities included: support the preparation and validation of action plans and visits by the IST to some countries to assess the implementation of action plans.

There is no monitoring and evaluation plan and the documentation on monitoring activities is limited. Most stakeholders said there was a lack of follow-up visits to their countries by the program team. Every action plan was developed with a monitoring framework which detailed that each country monitors the program implementation to improve the visibility of the programme's actions and impacts.

A simple indicator matrix was designed in Excel to provide quarterly information on the following:

- *The amount of the annual budget for the Action Plan;*
- *The number of health workers trained in early detection and management of Noma;*
- *National coverage in terms of the number of health centres with a trained agent on the total number of health structures;*
- *The number of health workers or community health workers carrying out Noma detection and management activities in the country;*
- *National coverage in terms of the number of community agents or community health workers trained out of the total number of areas with a community agent in the country;*
- *The number of Noma trainers trained at the health district level in the country;*
- *The number of beginning Noma cases detected and managed;*
- *The total number of Noma cases detected;*
- *The percentage of people who are aware of risk factors and early signs of Noma.*

It was expected that the template will serve as an indicator tracking table that will enable easy reporting on Noma. The monitoring templates are not used by the countries to report progress or non-progress on the program. The monitoring and evaluation component of the program has been weak and has led to the lack of information on the program reach. It is generally acknowledged that countries have been somewhat reluctant to complete the monitoring table, except Niger and Senegal. They tried to complete the reporting template at some points. The roles and obligations of countries must be redefined in order to better implement the monitoring and evaluation plan of the program.

The inter-regional workshops could be used to report on the program indicators and not just activities conducted by the countries. The reporting on indicators would enable the importance of results and reaching the objectives. The participation of countries in the workshop could be conditional on proper reporting including on the indicators. The programme indicators need to be redefined clearly and this needs to involve PBM. The lack of M&E information does not provide a clear picture of the achievements of the program. The RNCP is unable to accurately and objectively outline its current achievements in the absence of M&E information on indicators.

### Equity

Overall, the five principles of equity are reflected in one way or another in the regional programme not only in its design but also in the implementation of the three-year action plans.

**Human Rights-Based Approach** – the Noma program aims to promote human rights, mainly the right to health and life of poor children.

**Equity and gender** - the evaluation approach therefore focused on verifying and assessing the fairness of the progress made in the various objectives and components of the RNCP. The review of the Noma orientation guide and the various country action plans showed that vulnerable groups such as the poor, children from poor families or backgrounds, children with or without disabilities are targeted. Most of the Noma cases are found in hard to reach areas though some live near the few Noma centres. The program needs to make more efforts to reach those in the hard to reach areas and create an effective and better referral system for Noma cases. All RNCP activities planned and implemented under the various action plans considered all beneficiaries without discrimination to gender or sex. The beneficiaries of the various training courses organised included both men and women. The reports presents data that are disaggregated as needed.

**Capacity development** - has been largely considered by the Noma programme, especially since the main activity of the programme in its design is the training of health workers and community actors.

WHO, through the support of Hilfsaktion, has invested in capacity building by developing a planning framework based on strengthening the role of health care providers and community health workers in the prevention and early detection of Noma cases, with the aim of strengthening and improving the impact of interventions included in the annual action plans. The programme has trained over 5000 health workers (doctors, nurses, midwives, community health workers and medical assistants) in 10 countries to be able to carry out preventive and management actions for Noma disease. The review of the reports from countries as well as the available quarterly reports highlight the achievements. The following table details the health and community actors trained in the countries.

### Opportunities for Noma

Various opportunities available at the national level to make the programme more effective and sustainable include:

- The integration of Noma into the NCD and NTD programmes in all the countries affected by Noma,
- The existence of a national programme to combat malnutrition,
- The national poverty reduction strategy,
- The policy of free treatment of Noma cases,
- The development of modules for training on Noma and integrating them into the curriculum of medical and other health professionals schools in Burkina Faso. and
- Training of paediatricians on early detection of Noma and oral diseases contributes to increasing the accessibility of oral health care for children.

Internationally, WHO's commitment to a new classification on Noma and the availability of Hilfsaktion Noma e. V. to continue its financial support for the fight against Noma are opportunities to be utilized by the various national programmes. The programme will have to be integrated for effectiveness, efficiency and results. Noma could work closely with other programmes already carrying out community activities, political will in all countries and the support of local administrative and traditional authorities.

The various opportunities that exist at Community level must be utilized to fill the gaps in information and education of the population on the disease, and the difficulties of referrals and epidemiological surveillance. The widespread availability of community health workers, the availability of local NGOs willing to collaborate with national programmes can help to intensify outreach activities to rural communities.

The evaluation team suggests that the Oral Health team review Noma as an NCD versus Noma as an NTD in order to make the fight against Noma more effective and targeted. Oral health is not a priority for most of the countries nor is there funding for the programs and as a result, the RNCP suffers from the poor appreciation of the Oral Health Programme. Noma is a pathology that falls within the field of Oral Health but to increase the attention, it would be better to increase collaboration and integration with NTDs to gain more attention and funding. The NTDs *focus on improving living conditions and access to primary health care* while the NCDs focus more on *hygiene-dietary measures to prevent disease*. A change in classification ensures that the management of the Regional Noma Control Programme at the national level would improve and include persons with backgrounds in oral health, nutrition and immunization

On the other hand, the RNCP has increased the attention of stakeholders, governments and communities on the need for a stronger Oral Health programme in the countries. The Noma program has highlighted the need to strengthen of Oral health programs in Africa.

## Lessons Learned

- a. The RNCP strategic programmatic framework does not provide a logical results framework that details strategic outcomes. The absence of the common operational plan and the absence of performance indicators in all countries leads to difficulties in monitoring progress of the Noma programme. As a result, the evaluation does not provide a coherent and comprehensive report on the achievements of the program objectives.
- b. Strengthening program actions in communities through collaboration with local associations involved in the fight against Noma, traditional healers, and matrons contribute to the stability of the program. In the countries visited (Benin, Togo, Mali, etc.), interviews with leaders of NGOs and dental associations revealed a great willingness to support the fight against Noma. These organizations have demonstrated their proximity to the communities and the results already achieved.
- c. High staff turnover at the MoH and the introduction of new organization structures at the ministry level led to weakened coordination at the national levels and affected the implementation of the action plans.
- d. The funding and disbursement mechanism at the ministries of health is slow, delaying the implementation of activities according to the established timetable, which is reflected in the programme results. There needs to be an improvement in the quality of requests received for processing and reporting.
- e. Collaboration between local and international Noma associations has ensured the continuity of the actions initiated by the RNCP after case detection in the surgical management of Noma cases. Mali and Burkina Faso are the countries that use this approach a lot.
- f. The lack of multisectoral integration into the Noma programme in some countries did not work in favour of the programme because this approach could at least allow activities to proceed even in the absence of funding.
- g. The use of communications officers for media outreach. In Senegal, awareness-raising in the country's local languages using the approach made it possible to quickly convey information to the beneficiary communities.
- h. Several of the NNCP established a rapport or understanding for collaboration with the nutrition and similar programmes, knowing that this is the main risk factor for Noma. Nigeria has also taken this into consideration and started working with these programs from the beginning of implementation.
- i. The project management skills of the focal points of the Noma program is low. The focal points are technically qualified as Oral Health professional but lack adequate project management skills and this needs to be improved. The RNCP can include this as a training session in one of the regional meetings.
- j. The regularity of coordination meetings between local associations and the NNCP has made it possible to continue the program activities to some extent in the absence of funding from the RNCP. Potential conflict should be anticipated, and mitigation measures put in place to minimize conflict.
- k. There is a need to institutionalize the reporting frameworks and monitoring forms that were introduced at the start of the program. The lack of an M&E framework and non-utilization of the monitoring forms does not allow the programme results to be verified and seen. There should be annual internal reviews by PBM of the program to ensure compliance with report, setting up indicators and establishing measurements and reporting frameworks.
- l. The programme brings together mainly the NNCP actors and does not involve other Noma stakeholders for collaboration and have invited other partners and stakeholders at intervals. There is a need to reinforce involvement of other stakeholders for a joint approach to fight Noma.
- m. The alignment of WHO's strategic plans for Noma control with national health policies are important assets for the sustainability of results and the implementation of actions for Noma elimination.
- n. The management of programmes involved in the fight against Noma in the Ministry of Health by oral health specialists in Senegal has fostered rapid integration and ownership of the programme.



## Conclusions

- a) The RNCP has enabled ten countries in Africa, mainly in the West region where Noma cases are regularly reported, to develop action plans and implement various disease prevention activities. The main strategy used is improving knowledge about Noma and awareness raising including behaviour change communications among health workers, community health workers, and community actors. The programme should further encourage actors to develop initiatives based on the specific character and context of each country to document best practices in Noma detection and case management.
- b) Noma, although in the category of Non-Communicable Diseases, has characteristics that bring it closer to Neglected Tropical Diseases. WHO should investigate to reclassify Noma or study which program would benefit Noma the most within the current WHO clusters and units. Alternatively, the Noma program could continue to be managed by oral health / NCD department and in the same time be support and monitor using tools and funds coming from NTD department.
- c) There are not enough dedicated centres for the treatment and care of Noma patients. There are centres in Nigeria, Niger and Guinea Bissau. There is a need to establish or integrate Noma care centres in Mali and Burkina Faso as they have large number of Noma cases as well. There is a need to establish Noma care centres or even WHO should encourage MoHs to strengthen the integrated approach to Noma management. There is also a need to integrate Noma in all countries with other disease management.
- d) The RNCP's approach to the elimination of Noma focuses more on training providers and raising awareness. Early diagnosis of Noma is a priority in the different stages of the programme. The populations affected by Noma are poor and in hard-to-reach areas. It is important to provide them with practical tools to improve their nutrition, oral health and lifestyle with local resources.
- e) The RNCP is an opportunity to improve the visibility of the Oral Health Programme in countries. It provides opportunity to create linkages between oral health and other programs. The RNCP has brought more attention to oral health in each of the countries.
- f) The sites where the RNCP operates are the areas where chronic malnutrition rates are most prevalent. This vicious circle between malnutrition and Noma shows the need to reinforce collaboration with the nutrition programme in the fight against Noma.
- g) The RNCP should enable discussions between countries using social media platforms (WhatsApp group, Facebook groups, LinkedIn group) apart from the regional meetings. This will help countries to exchange information and best practices about their activities.
- h) Some of the programme managers do not have programme management skills, though they have technical skills in oral health. This is reflected in the different approaches used to solve problems as they arise or conduct program activities. RNCP needs to include sections on program management in their meetings and need to encourage country program to utilize the WHO expertise available to them in country.
- i) WHO remains the main source of funding for the programme in all countries and the delay in the processing and transfer of funds has a significant impact on the implementation of field activities. The RNCP needs to refresh NNCP on the financial and administrative processes.
- j) Noma Focal Points at WHO country office do not have the technical skills to manage the programme. They are experienced managers and can discuss program issues, but most are unable to discuss Noma as an oral health professional.
- k) The monitoring of the implementation of the action plans needs to be made rigorous and systematic not only at the country level but also at the regional level in order to provide the programme with up-to-date, valid and reliable data for reporting and decision making.
- l) RNCP could advocate with MoH to include key indicators on Noma on the DHIS2 for systematic collection. This will improve surveillance in these countries as well as provide up to date and accurate data on Noma.

## Recommendations

In view of the various findings, conclusions and lessons learned, the following recommendations are made:

**Definition of a long-term vision.** The fight against Noma requires the adoption of an approach that focuses on a more strategic vision such as the definition of "Zero Noma Cases" in Africa. For this purpose:

1. Establish approaches that helps countries make projections for the elimination of Noma in the country within a given timeframe (5, 10, 15 years).
2. Define a high-level goal and make strategic plans that focus on the number of cases treated and lives saved, taking into account gender and equity.

**Promotion of the multisectoral approach.** As Noma is linked to immune dysfunction and the reduction of immune function is associated with poverty, malnutrition, poor hygiene and sanitation (lack of clean water, contact with animal waste):

3. Adopt a multisectoral approach within WHO and in countries that would enable the Noma programs to work with other programmes (immunization and nutrition) to improve effectiveness and integration.

**Research and development.** Information is always limited on the aetiology of Noma.

4. Encourage and invest in advanced research into the disease and increase literature on the aetiology of Noma.
5. Work with WHO HQ Oral Health team to conduct a systematic review of Noma Literature.
6. Collaborate with research teams, initiate studies to measure and document Noma as a disease.
7. Train the different Noma actors in research so that they can identify the different research themes and support research initiatives in their country.

**Strengthening resource mobilization and promoting learning.** The fight against the Noma must mobilize more support from partners including a greater commitment and participation of the MoH.

8. Support countries through advocacy by enabling them to raise funding for Noma from sources other than WHO and the need to diversify the sources of funding for Noma;
9. Work with the NNCP to advocate for commitment from the MoH through funding and coordination of all actors involved in the fight against Noma.
10. Advocate with WHO Oral Health team to review the classification of Noma. The advocacy would answer the question how the Noma program would obtain benefit most within the current WHO structure (clusters, departments and units).

Promoting learning to improve future action plans and implementation of activities.

11. Encourage collaboration between countries by supporting study and learning trips from more fragile countries to more advanced countries in the implementation of the action plans.
12. Invite other actors to the regional meetings including local NGOs, associations, trainers, researchers, surgeons, dentists, traditional practitioners to create an exchange framework to improve interventions at the community level for effective Noma control.
13. Utilize the regional meeting platforms to improve project management skills

**Strengthening and improving accountability.** In view of the limitations in the monitoring and evaluation system that marked this phase of the implementation of the RNCP:

14. Develop action plans that describe in detail the annual targets for each activity, objectives, outputs and resources needed.
15. Increase and improve monitoring visits for the Noma program. These visits could be used to improve program management, assist in processing funding request and advocating for the Noma program.

16. Improve the quarterly reporting template and ensure that it is used by all NNCP for reporting on progress made by the project.
17. Develop standardized indicators for the Noma project that are specific, valid and measurable for all objectives of the Noma program. The RNCP should work with PBM to standardize the indicators across the project. This will enable the establishment of a database with up to date, valid and reliable data on RNCP.
18. Strengthen and improve the system for providing handovers at the NNCP and RNCP.

Management and Coordination. The program needs to work with other organizations who work on Noma.

19. Encourage the RNCP to collaborate with all other actors capable to contribute in the fight against Noma such as African surgeons and other surgical teams.
20. Define clearly and precisely the roles and responsibilities of the Regional Programme and the IST regarding the support to be provided to countries, as well as establish a work schedule and a method of communication and above all ensure that countries are informed of this support in order to know who to contact as needed.