Haiti Strategic Narrative in support of an EAF application

MSPP

JSI provided technical assistance to the MSPP of Haiti to lead the development of this application package with the support of partners from PAHO and UNICEF.

Contents

Introduction

Security Situation

Since 2010, Haiti has been faced with intense instability including protests, gang violence, armed conflict, and high prices for and unavailability of fuel. During the last five years, armed gangs have multiplied dramatically in certain communities, including Cité Soleil, Martissant, and other areas in the West, Center, and Artibonite Departments. The implementation of immunization activities at the community level is challenged due to armed gang confrontations. Law enforcement has had little to no effect in curbing the effects of this violence. This has led to mass internal and external migration throughout Haiti.

Many of the proposed interventions presented here will be implemented using recurring costs to support activities such as hiring staff, providing necessary tools and equipment, etc. Due to Haiti's continued status as a fragile country, there is currently no plan to transition these costs to the UCNPV by the end of the EAF funding cycle.

Zero-Dose and Under-Immunized Children in Haiti

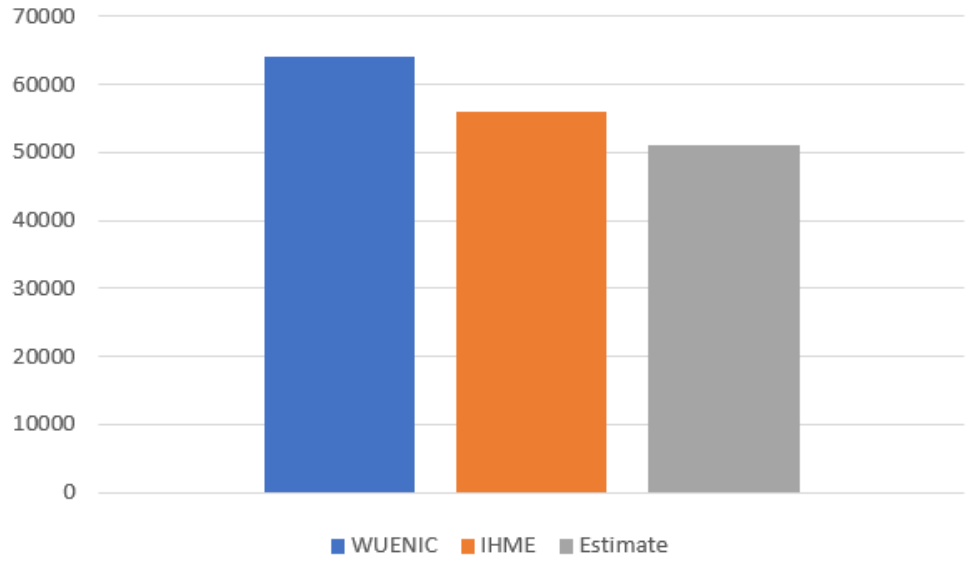
Financial and technical support from partners has helped the Haitian government to increase the availability of vaccines and to deploy CHWs in hard-to-reach areas to raise awareness and help immunize zero-dose and under-immunized children. Despite these efforts, the number of zero-dose and under-immunized children for the whole country remains high.

In late 2022, a situation analysis was conducted by JSI to determine the prevalence and distribution of zero-dose, under-immunized children, and missed communities in Haiti. A literature review was also carried out to identify the barriers and enablers to access immunization. As a part of the qualitative analysis, interviews were conducted with the Ministry of Public Health and Population (MSPP), the UCNPV, UNICEF, and PAHO/WHO to get an overview of their understanding of zero-dose children. Second, interviews and focus groups were conducted in two areas (one urban, one rural): Cité Soleil (West) and Belle-Anse (Southeast). These two areas have a high prevalence of zero-dose children, but face distinct challenges in terms of access to immunization for non-vaccinated children.

This analysis showed the number of zero-dose children in 2021 ranged from 50,000 to 60,000, although these estimates varied from source to source (Graph 1)[1].

[1] Page 17. Fato, Fene and Kitts, Emily. *Prevalence and distribution of zero-dose children and the determinants of under-immunization in Haiti.* February 2023.

Graph 1: Variation of zero-dose estimates among data sources



Using WUENIC data, the same analysis found that from 2016 to 2021, the rate of Penta 1 completion decreased from 84% to 75%. In line with this, dropout rates increased from 20% to 24% in the same time period. Other data sources are not so pessimistic, however across the board, Penta 1 rates are decreasing and dropout rates are increasing (Table 1).

Table 1: Distribution of zero-dose and under-vaccinated by data source and year

		Penta 1 (%)	Penta 3 (%)	Dropout (%)
2021	**WUENIC**	75	51	24
	IHME	78	60	19
	Estimation	82	66	16
2016	**WUENIC**	84	64	20
	IHME	79	62	17
	Estimation	77	70	7

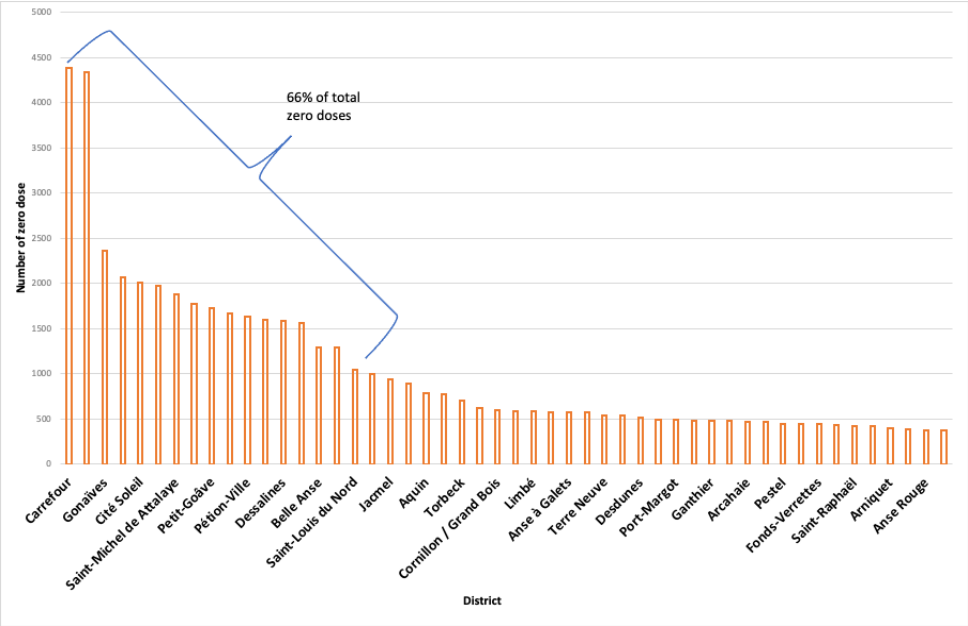
Priority Geographic Areas

At commune-level, the average number of under-vaccinated children is 685 and the average number of zero-dose children is 368[2]. Out of all 140 Communes in Haiti, 50 have more than the average number of zero dose children per district (Graph 2). Seventeen of these communes

[2] Page 20. Fato, Fene and Kitts, Emily. *Prevalence and distribution of zero-dose children and the determinants of under-immunization in Haiti.* February 2023.

represent 66% of all zero-dose children. Of these communes, eight are located in the West department and account for 38% of all zero-dose cases[3].

Graph 2: Distribution of communes with a number of zero-dose children above the average of 368 for 2021



Additionally, 23 communes were recorded as having a high zero-dose prevalence and a low ratio of health institutions offering immunization services for every 1,000 children < 1 year old (Graph 3). These communes are located in Artibonite, Centre, Nord, Ouest, Sud, and Sud-Est Departments[4]. Ouest, Artibonite, and Nord departments have the highest number of low-performing communes in terms of zero-dose and under immunized children and low ratio of health institutions.

[3] Page 19. Fato, Fene and Kitts, Emily. *Prevalence and distribution of zero-dose children and the determinants of under-immunization in Haiti.* February 2023.

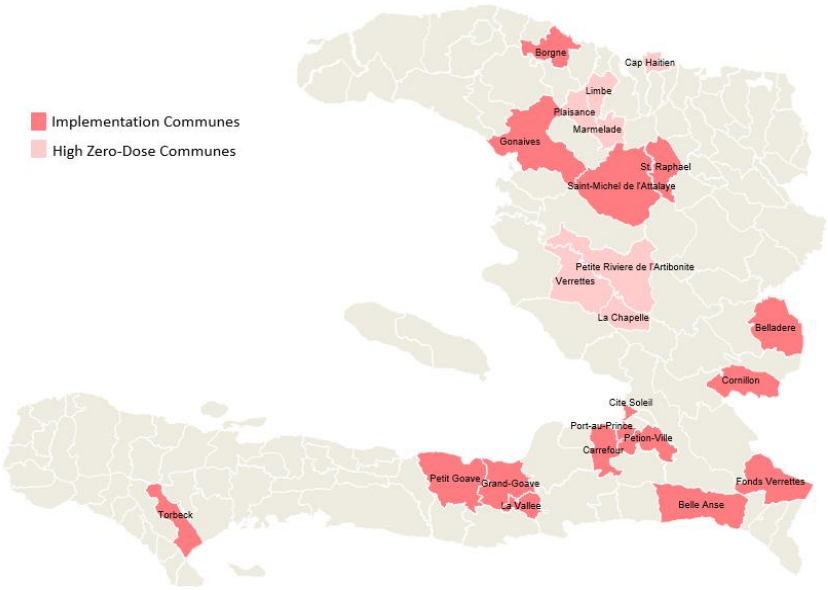
[4] Page 20. Fato, Fene, *Prevalence and distribution of zero-dose children and the determinants of under-immunization in Haiti.* February 2023.

Table 2: The 23 lowest performing municipalities, 2021

District	Département	Ratio d'institutions sanitaires offrant des services de vaccination pour chaque 1000 enfants de moins d'un an en 2021	Nombre de zéro dose en 2021
Gonaïves	Artibonite	1.4	2357
Saint-Michel de Attalaye		1.5	1873
Petite Rivière de l'Artibonite		1.6	1772
Verrettes		1.8	992
Marmelade		1	621
La Chapelle		1.2	574
Belladère	Centre	1.8	532
Cap-Haïtien	Nord	2	1284
Plaisance		1.6	891
Limbé		1.3	580
Borgne		1.1	488
Saint-Raphaël		0.7	420
Carrefour	Ouest	1.6	4385
Port-au-Prince		1.4	4337
Cité Soleil		1.2	2010
Grand-Goâve		0.8	1974
Petit-Goâve		1.3	1723
Pétion-Ville		1.4	1626
Cornillon / Grand Bois		1.3	590
Fonds-Verrettes		1.5	438
Torbeck	Sud	2	698
Belle Anse	Sud-Est	1.5	1289
La Vallée		1.1	472

Based on this information, and due to security concerns and funding constraints, EAF funding will target sixteen of these communes in Artibonite, Centre, Nord, Ouest, Sud, and Sud-Est Departments (Map 1). Among these communes, the total number of zero-dose children is estimated to be 31,926.

Map 1: Communes where EAF will implement



EAF Goals

In order to reach all zero-dose and under-immunized children in Haiti, the UCNPV has established mid-term goals (2023 - 2025) focused on the populations in six key Departments: Artibonite, Centre, Nord, Ouest, Sud, and Sud-Est. These goals include:

- Implementation of community-based strategies tailored to reaching zero-dose and under-immunized children;
- Improving the supply chain system to run more effectively and efficiently; and
- Building the capacity of EPI staff, including health workers, to manage vaccine stock and track data

Achieving these goals will result in vaccinating 30% of zero-dose and under-immunized children by the end of 2025. Based off data from WUENIC, IHME, and the analysis estimate, this translates to an additional 15,000 to 18,000 children vaccinated over 30 months (June 2023 - December 2025).

All partners in Haiti, are committed to achieving these goals and reducing the number of zero-dose children and missed communities. This support is reflected in policies, budgets, and active projects. Additionally, UCNPV and national stakeholders have begun planning for an annual workplan. While this is being developed, an interim workplan is in place. Sub-national stakeholders have historically be very involved in immunization activities and it is expected this support will continue.

In 2023, an updated mapping of Gavi Alliance partners (MSPP, UNICEF, PAHO, WHO, USAID, World Bank), extended partners, and local partners (local NGOS, CBOs, and religious organizations working in health) was conducted (attached). UCNPV will also coordinate with these organizations to ask for their assistance to support the implementation of EAF activities in the most remote areas.

Addressing Zero-Dose with EAF funds

Barriers and Facilitators to Zero-Dose

While the literature review did not identify any barriers specific to immunization in Haiti, when examined in combination with other qualitative data, many of the results can be extrapolated to the Haitian context.

The recent 2023 zero-dose quantitative and qualitative analysis findings provided key evidence of the barriers that need to be addressed to improve immunization rates and identification of communities with high rates of zero-dose, missed and under-immunized communities. Through

workshops and conversations, partners identified the following barriers as priority technical areas for implementation:

- **Insufficient human resources:** Not all health facilities are able to staff their regular immunization sessions. A lack of skilled health providers makes it difficult for clients to receive quality health care. Many have not received sufficient training in recent years. Additionally, health personnel are often not available to meet the clients' needs because contracts are not renewed on time due to administrative issues at the health center level.

- **Socio-political crises affecting both clients and healthcare providers (violence, fuel prices, etc.):** In Artibonite, West, and Center Departments, health workers, and clients are faced with armed confrontations between gangs. This results in an inability to seek or provide adequate immunization services. Since the earthquake in 2010, services have also been suspended or delayed. Even in relatively secure areas, Haitians must deal with high fuel prices. This can often prohibit an individual's ability to travel to and from the health center. Lack of public transportation and increased cost of motorcycle cabs (due to high fuel costs) also prevent caregivers from bringing their children to the vaccination post.

- **Isolation:** Many households live in isolated locations far from the nearest health facility. To access services, they must travel long distances, especially in rural communities. In Belle-Anse, because of mountainous and poor road conditions it takes a long time just to walk to the health facility. This prevents caregivers from seeking vaccination services.

- **Weak supply chain:** A supply chain assessment in 2022[5] found poor vaccine stock management practices has led to insufficient quantities of vaccines and vaccine wastage. Lack of accurate logistics data makes it difficult to provide health facilities with the correct vaccine quantities. This, compounded with transportation challenges, results in incorrect stock levels or stock outs.

- **Social, cultural, political, or gender-related barriers:** Social practices and beliefs are also deterrents to determining health-seeking behaviors. Workshop participants noted men are the decision-makers in the household and that women simply carry out the man's decisions in all areas - including whether or not to vaccinate children or for women to use contraception. In cases where the man does not consent to vaccinating a child, they will not pay for transportation to the health center. Within the community environment, women's views are not always considered while a man's consensus is always needed to support a women's decision. When deciding how to spend the money they earn, 46% of women note they decide alone and 51% decide with their spouse. Only 57% of women own a cell phone compared to 70% of men. Seventy-seven percent participate in the decision-making for their health care. Seventy-eight percent noted they faced at least one

[5] Botoko, Jean Pierre, 2022, *Rencontre des Managers nationaux du PEV Chaîne de froid logistique*

problem accessing health care with financial availability the most frequently cited as the barrier to access care (73%).[6]

The following factors were identified as enablers to child vaccination:

- Use of maternal health services, mothers who delivered at a health facility, or had four or more antenatal visits had the highest exposure to vaccination.
- Home visits by Community Health Workers (CHWs) brought information directly to the caregiver increasing their knowledge and sensitizing them to the benefits of immunization.
- Community engagement facilitates increased access to zero-dose and under-immunized children. CHWs mobilize churches, health committees, and women's groups to help sensitize and disseminate information to caregivers to vaccinate their children.
- Use of text messages to remind parents about follow-up appointments
- CHWs extended the availability of immunization services to the weekends by conducting activities for parents who are not available during the week.

Past Immunization Experience (Lessons Learned)

In 2019 Haiti received $8.6 million to cover the period June 2019 through December 2024 under Health System Strengthening (HSS) funds. In quarter two of 2023, Haiti will submit a follow-on application for HSS funds worth $4.9 million to cover June 2023 through December 2025. This EAF proposal has been developed in partnership with recipients of the next round of HSS funding and interventions from both proposals are designed to complement each other while not duplicating efforts.

Between January and October 2017, following a situational analysis on the status of immunization coverage in Cité Soleil, Haiti, an urban immunization model was developed to improve coverage rates. Following this, JSI began implementation of the urban immunization model in Cité Soleil among seven health facilities. In 2022, these activities were expanded to two additional communes (Carrefour and Delmas) and eight health facilities. As of 2023, JSI works with twenty-one total health facilities.

Overall, the implementation of these interventions shows an improvement of vaccination coverage in each of the communes with access to immunization services improving significantly.

[6] 2016-2017 DHS

The program has also managed to continue operations through political and social unrest, and has ensured activities continue despite Haiti's current instability.

Despite this success, human resources have been an ongoing challenge faced by PEF TCA and HSS implementors. A lack of health center staff and Agent Sante Communautaire Polyvalent (ASCPs) has resulted in interrupted and insufficient service provision throughout Haiti. To address this, partners plan to hire additional ASPCs and AIPs to fill in this gap.

In an effort to build off progress made by current HSS and PEF TCA funding, the EPI and partners will implement interventions guided by lessons learned over at least the last four years. Examples include: improved stock management practices; more frequent tracking of zero-dose and under-immunized children at the community level; holding regular coordination meetings between partners; adapting to security challenges by taking advantage of remote implementation opportunities and engaging local community actors.

Key Populations

Within each of the targeted communes, activities will be tailored to various sub-populations. Urban and Peri-urban communities will be targeted using an urban immunization model developed in 2016 by MSPP and partners. This model addresses weaknesses identified through monitoring and assessment and strengthens successful practices. With EAF funds, the urban immunization model will expand to target urban communities in South and South East, and will focus on learning through supportive supervision, sensitization through newly established local community groups, and catch-up immunization sessions for zero-dose and under-immunized children. *Rural* populations will also be targeted through the scale up of Family Health Teams (ESFs) and the re-organization of service points. ASCPs will also be recruited and hired to support expansion of immunization services and demand generation.

It is important to note that while the zero-dose analysis was able to roughly quantify and locate zero-dose children within Haiti, the analysis does not provide a "profile" for zero-dose children. Throughout the implementation of EAF activities, partners will work with local communities to build this profile and further inform and adapt interventions as needed.

Interventions by Technical Area

As mentioned above, EAF funds will be used to target Departments with high zero-dose and under-immunized populations. These Departments include Artibonite, Centre, Nord, Ouest, Sud, and Sud-Est, and encompass the sixteen targeted communes which represent 50% - 60% of the estimated total of ZD in Haiti.

The interventions proposed in this document have been developed in partnership with JSI, PAHO, UCNPV, UNICEF, USAID, and WHO. The strategies proposed are a result of holistic multi-pronged approach. Each strategy is complementary to the others and contributes to the overall goal of

reaching zero-dose and under-immunized children across Haiti. Strategies proposed will also be used, in some cases, to update data estimates to contribute to the understanding of zero-dose children.

The proposed activities are evidence based and in some cases, are an expansion of current (and successful) urban immunization projects within Haiti. Given the strained security situation in Haiti, strategies have also been designed to work within security-challenged areas. In some cases, partners will engage with local organizations to build their capacity in responding to and working with the zero-dose community. This will simultaneously contribute to achieving our objectives and fostering local ownership of the solutions.

Haiti is faced with tackling several large simultaneous structural issues. While these issues are a priority, EAF funding will be used on the following focused interventions. Complementary activities will be encouraged under other available funding sources including PEF TCA and HSS funding.

Zero-Dose Tracking: Teams of operators (criers, recorders, and vaccinators) will be recruited and deployed, to reinforce and supplement health workers within identified communes to strengthen the active, monthly search to identify and vaccinate under-immunized children. Local partners who work in hard-to-reach areas, marginalized locations, and “red zone” locations will be engaged and supported to help identify and map zero-dose children for immunization.

The operating teams will also support health facilities in zero-dose communes by planning and implementing catch-up activities to reach under-immunized children and help deliver monthly vaccines from the communal storage facility to health facilities through catch-up activities.

Service Delivery: Partners will work with communities to reorganize service points (fixed, rally posts, catch-up campaigns) to more effectively target zero-dose children. In urban and peri-urban communities, fixed and outreach strategies will be emphasized and door-to-door immunization will be used to reach dropout cases. In rural communities, rally posts and door-to-door immunization will be employed to reach the most people. Partners will monitor the frequency, regularity, and completeness of services at all times to ensure quality service delivery. Additionally, non-health services and/or sectors will be engaged to prioritize zero-dose children.

In addition, partners will monitor and provide support for monthly recurring expenses to strengthen immunization activities in the health institutions. This can include the purchase of batteries for megaphones, fees for community meetings, transportation costs, etc. Financial support for the coordination of zero-dose activities at the UCNPV, DDS, and Communal Health Offices will also be provided.

Supply Chain: Logistics data is a key component of having accurate information for decision making such as for forecasting. One way to obtain this data is through monthly physical inventory to assess current stock levels. The previous month's stock numbers can be compared with current balance to serve as a temporary proxy of the quantities consumed and can provide a more

accurate resupply quantity for each health facility until dispensing data becomes available. Consumption data is the most reliable data to ensure the correct quantities of commodities are procured to meet the demands of the targeted population.

To maximize and leverage the transportation resources available, an integrated delivery distribution plan will also be developed among the MSPP programs, local partners, NGOs and the private sector to deliver commodities to the commune level. A coordinating system will be created among partners to assist the local government with the monthly transport of vaccine commodities to remote or inaccessible health institutions to carry out immunization activities. Commodities will be transported from the department level for delivery and when traveling from commune to commune to facilitate redistribution or emergency orders of vaccines.

The use of drones to deliver vaccines during periods of political unrest, areas of high risk, impassable road conditions, or remote locations will be assessed to improve the efficiency of the vaccine distribution system using innovative technologies. This strategy will be piloted in 10 communes as a part of a comprehensive package of immunization interventions including, communications / demand generation, community engagement, supportive supervision, etc. The use of drones to deliver vaccines has been implemented in other LMICs and has the ability to close the “last-mile” gap by enabling faster delivery of vaccines.

Data: To encourage data use for strengthening the immunization supply chain, a circular will be developed for health providers and data managers to increase awareness of the importance of how better data can improve supply chain performance. It will also state the requirement to enter and report vaccine management data for the monthly immunization report and the DHIS2 database. Additionally, meetings between the logistics team and the Evaluation & Programming Unit (EPU) will be held to support the review of vaccine management indicators in the DHIS2 database.

Community Engagement: Monthly community meetings within all the EAF supported communes will be held to inform and educate caregivers on the health services available to them and the importance of routine immunization. Community groups, composed of representatives from health institutions, influential local organizations, and local leaders, will be created in zero-dose communes. These groups will organize bi-monthly community awareness meetings on the benefits of immunization, the services provided by the local health facility and CHWs, and reduce any stigmas, barriers, or misconceptions around vaccinations. Creating these opportunities to communicate and speak with the community is a strategy to continually engage with the local population.

Partners will also engage local organizations to support the implementation of a zero-dose strategy. These organizations will work with partner staff to implement and monitor immunization activities focused on identifying and vaccinating zero-dose and under-immmunized children.

The involvement of grassroots community organizations deeply ingrained in the community such as youth clubs, boy scout groups, women's organizations (women's rights organizations, mothers clubs, religious organizations with a social and health vocation), religious congregations with a health center and community staff (such as the Sisters of Rivière Froide, in Carrefour), will be used for outreach and mass communication efforts to spread knowledge around immunization benefits. Partners will also engage local NGOs working in health (MSF France, FONDEPH, HHF, PHAREV, etc.) to support immunization service provision and will continue to build their capacity to identify and vaccinate zero-dose and under-immunized children. Engaging these groups will support their institutionalization and growth while also fostering their relationships directly with the local health departments and the UCNPV. These relationships can serve to supplement the ability of ASCPs to reach community members, given their own workload and limited ability to travel to remote locations.

An inventory of active CSO will be conducted in the urban and peri-urban communities who have a high concentration of zero-dose and under-vaccinated children. This will include identification of women's groups to empower other women to seek health and immunization services as part of advocacy efforts to strengthen a woman's ability to make decisions for the family. A selection of CSOs, maintaining a balance of male and female led CSOs, will be approached to work together with partners and caregivers to identify children and be part of community monitoring. Institutionalizing social groups as immunization champions may be piloted in a few communes and scaled over time to neighboring communes. Partners will also use these interactions to document and disseminate lessons learned from local CSOs. These lessons will be shared with all EAF partners.

In many cases, CSOs will be remunerated on the basis of their performance adapting the system modeled on finance based remuneration (FBR) already in use in certain communities. This strategy is used by several other partners in health centers throughout Haiti through funding provided by the World Bank. Through EAF funding, this strategy would be expanded to include non-health oriented CSOs to support activities such as community mobilization, zero-dose identification, etc.

In missed communities, a community engagement strategy will identify, sensitize, and train local leaders within these same communities to engage them in activities aimed at reaching children requiring vaccinations. Influential social leaders at churches, schools, hougans, voodoo priests, local political leaders, and other influential members will be approached to serve as immunization advocates.

Human Resources & Capacity Building: A sufficient number of skilled staff is essential to the management and operations of the supply chain. EAF funds will be used to expand and build the capacity of Family Health Teams (ESFs) which are comprised of ASCPs, Agent Infirmière Polyvalente (AIPs), and Infirmière Polyvalente (IPs) and to build the capacity of vaccine managers. To accomplish this, the UCNPV will train ten individuals (one from each Department) dedicated

to overseeing vaccine management. This will positively impact the vaccine stock at Department levels, with the goal of reducing stockouts and vaccine waste.

To improve the linkages between communities and re-engage caregivers and health facilities, 101 additional Agent de Santé Communautaire Polyvalents (ASCPs) and 10 supervisory agents (ten ASCPs per one supervisory agent) will also be hired to support the communes. As respected and well-known members already approved by their community, their role to help sustain the coverage of essential package of health services can simultaneously help increase vaccination coverage. Both female and male ASCPs will be recruited with the ideal ratio of 60:40 to reach both genders in the community and compensation packages will match national standards.

Supportive Supervision: Additional integrated supervision visits to health facilities located in zero-dose communes will not only monitor the implementation progress of zero-dose activities within the communes but will also support the monitoring and planning of immunization services integrated with family planning and nutrition. These sessions will use the "learn by doing" approach which will increase the capacity of health center staff to carry out effective and efficient immunization programs. For hard-to-reach and inaccessible facilities, local partners will be engaged and supported to provide supervision. UCNPV and Departmental staff will also be engaged to participate in these supervision visits.

Integration

The UCNPV is actively working to integrate COVID-19 services into routine immunization. This incorporation began in 2022 and is expected to continue through the life of the EAF funding (December 2025). However, due to Haiti's status as a fragile country, there is currently no official plan to integrate immunization with other health sectors (ex: nutrition and maternal health). The sustainability of integrated programs remains the greatest challenge, as the maintenance of coordination between services must be ensured through regular follow-up meetings between many stakeholders.

Despite this, partners involved in the development of this EAF proposal plan to conduct supportive supervision visits to select facilities where they will help develop plans to begin the integration of immunization with other health services. The twice-yearly supervision visits will serve as an opportunity to observe the integrated services, and provide feedback as needed.

Campaigns

The 2023 Interim National Immunization Plan includes large multi-antigen (OPV, RR, and DTP) campaigns as well as smaller catch-up campaigns in all ten departments. The first multi-antigen campaign is scheduled for April 2023 and catch-up campaigns will occur every 4 months to ensure all children are reached. It is expected that the twenty three communes identified as having high zero-dose populations will be prioritized during these campaigns.

Additionally, a national COVID-19 campaign is expected to occur in 2023. UCNPV will continue its efforts to integrate COVID-19 vaccination into routine immunization services. Throughout 2023, partners will also discuss the potential to use CDS COVID-19 (funded by Gavi) to identify and vaccinate zero-dose children as a way to support the integration of COVID-19 services.

The UCNPV is also working to complete and submit an application for measles supplementary immunization activities (SIA). These activities can also help identify additional zero-dose children.

Gender considerations

While the zero-dose analysis did not reveal any specific gender-related barriers, it is common that gender norms can affect immunization rates[7]. Gender can restrict a woman's mobility, self-confidence, access to resources, time, and decision-making ability when it comes to seeking healthcare and immunization services for herself and her children. With a high percentage of women in the frontline health workforce, gender-related barriers, including those related to the safety and security of health workers, can also affect service delivery. To address these issues, funding from the EAF will build on work already established by other donors [ex: Organization for promoting community health (ODSAC) and Consortium of women for hope (KOFALES)] that have identified specific gender-related barriers in the health sector.

The aforementioned activities will address any potential gender disparities by:

- Engaging men to inform and influence their behavior towards the importance of childhood vaccination. ASCs and peer immunization champions will work with men to serve as change agents and to advocate for their families to seek immunization services because they understand the importance of doing so.
- Ensuring equal representation of men and women in established local community groups.
- Ensuring the equal recruitment and training of any hired positions (ASCPs, vaccine managers, etc.)

Monitoring and Evaluation

Monitoring

Each of the proposed interventions will be monitored at the sub-national and national levels on a routine basis. The following indicators will be reviewed on an annual basis:

[7] Page 28. Fato, Fene, *Prevalence and distribution of zero-dose children and the determinants of under-immunization in Haiti.* February 2023.

- Nombre enfants zéro dose au niveau national
- Abandon entre le DTP1 et le DTP3 au niveau national
- Abandon entre le DTP1 et la dernière dose de VAR systématique au niveau national (VAR1 ou VAR2)
- % d'établissements de santé n'ayant déclaré aucune rupture de stock de DTP pendant toute l'année
- Respect ponctuel annuel des obligations de cofinancement
- Nombre d'enfants ayant reçu le DTP1 dans les zones d'intervention ciblées
- Abandon entre le DTP1 et le DTP3 dans les zones d'intervention ciblées

Iterative Learning

In an attempt to understand the reach of these interventions, and to improve program implementation, implementing partners will use the following learning questions to guide their implementation:

1. **What are effective ways to engage with other partners to reach marginalized and forgotten communities and zero-dose children?** Throughout implementation, local organizations will be identified to work with implementing partners to identify and reach zero-dose and under-immunized children. On a regular basis, partners will perform coordination touch points to assess the impact of these local organizations and how the partnership can be improved to further reach target populations.
2. **Are specific approaches designed to reach zero-dose children and forgotten communities working? what has worked well, what has not worked as well, and why?** Partners will use supportive supervision visits to assess the progress made against reaching zero-dose children. During these visits, partners will gain an understanding of which activities are working well and which could be improved. This information will be reviewed on a regular basis and adjustments will be made as needed.
3. **Are approaches to addressing gender barriers effective in increasing immunization coverage: why or why not?** Partners intend to incorporate gender lenses to several activities. These activities will be assessed for their effectiveness and results will be reviewed on a regular basis. Adjustments will be made in coordination with all partners as needed.

Supportive supervision visits will be used as a "check-in" with community health centers to informally understand the effectiveness of the program and monitor zero-dose and under-immunized rates. This will allow for an iterative approach across the implementation period and will give partners room to switch focus from one area to another if data indicate this is necessary.

Additionally, learning from past HSS interventions, partners will ensure coordination meetings are held to avoid duplicative efforts or gaps in coverage.

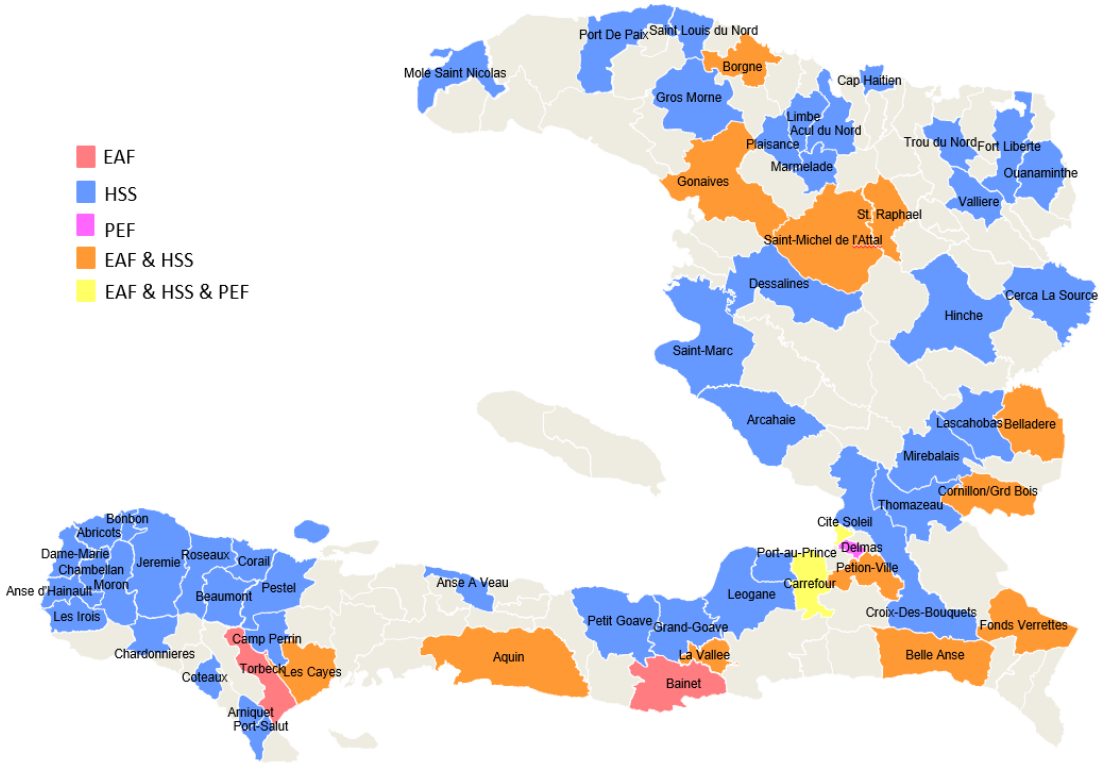
Addressing Zero-Dose with Other Funds

Currently, partners are implementing immunization activities under funding provided through PEF TCA, HSS, CDS Needs-Based, and CCEOP. PEF activities address urban immunization and focus on community engagement and reaching under-vaccinated and zero-dose children. The CCEOP has contributed enormously to the improvement of the quality of vaccines administered to target children by providing the country with solar equipment equipped with remote temperature control monitors.

The EAF funds are intended to serve as one part of a larger support system in Haiti and will focus on 16 out of the 23 lowest performing communes. Upcoming PEF TCA and HSS funds will be allocated to expand and complement the proposed EAF activities to have a wider reach and maximize support.

In coordination with this EAF proposal, the UCNPV is also submitting an application for continued HSS funding (years 3, 4, and 5). These two funding requests will complement each other by identifying and locating zero-dose and under-immunized children through one arm (EAF), and ensuring a well-functioning and well-equipped immunization program through the other arm (HSS). Map 2 displays which communes will be supported by which funding streams, noting that HSS is currently operational nationwide, and the HSS highlighted areas below represent where new HSS funding will focus.

Map 2: Communes in which EAF, HSS, and PEF are planned to operate



With HSS funding, the UCNPV will address cold chain and waste management needs through:

- Upgrading the cold chain system to properly maintain and extend the shelf life of all vaccines at each level of the supply chain.
- Construction of dry storage warehouses for ancillaries at the central and departmental levels.
- Installation of solar-powered cold rooms and remote temperature control monitors at department-level to monitor the performance of cold chain equipment and to maintain the integrity of the vaccines.
- Installation of large capacity solar refrigerators in the sub-departments, communes, and UAS.
- Organizing an assessment to review waste handling, processing, and disposal practices
- Acquisition and installation of ten high-capacity incinerators that meet environmental protection standards (1 per DDS)
- Implementation of a vaccine waste collection and disposal plan

EAF funding will support these activities by coordinating the structures of the cold chain logistics sub-committee at the central, departmental, and communal levels for good planning and monitoring of supply chain activities.