Evaluation of Gavi's Contribution to Reaching ZD and missed communities

Country Case Study: Ethiopia

March 2024

Gavi The Vaccine Alliance

Ipsos

Contents

1 Context 4
2 Findings 13
Objective 1: Relevance and coherence of Gavi's ZD agenda 13
Objective 2: Operationalisation of the ZD agenda 23
Objective 3: Contribution of Gavi 4.0 pro-equity and ZD grants 26
3 Annex 32

List of figures

Figure 1.1: Timeline of Gavi 4.0 and 5.0 grants in Ethiopia (excluding Vaccine Introduction Grants) 10
Figure 1.2: Key actors in Ethiopia under Gavi 4.0 and Gavi 5.0 11
Figure 1.3: Ethiopia theory of change for Gavi 5.0 12
Figure 2.1: Select vaccine coverage (WUENIC), full immunisation schedule, and drop-outs (WUENIC) in Ethiopia: 2015–2022 14
Figure 2.2: Percentage of ZD in hard-to-reach and undeserved settings 16

List of tables

Table 1.1: Grants received and applied for by Ethiopia under Gavi 4.0 and 5.0 6
Table 2.1: Total financial resources for immunisation by source 23
Table 2.2: Mapping ZD related outputs to pro-equity interventions implemented under Gavi 4.0 with continued implementation into Gavi 5.0/5.1 28
Table 3.1: Desk review documents 32
Table 3.2: List of academic sources 32
Table 3.3: List of stakeholders 32
Table 3.4: Mapping Gavi 4.0 grants using available documentation 33

List of acronyms

CCE	Cold-chain equipment
CCEOP	Cold-Chain Equipment Optimisation Platform
CHIS	Community Health Information System
cMYP	Comprehensive Multi-Year Plan
CSO	Civil society organisation
DTP	Diphtheria-tetanus-polio
EAF	Equity Accelerator Funds
EPI	Expanded Programme on Immunisation
FPP	Full Portfolio Planning
GPF	Grant Performance Framework
HSS	Health System Strengthening
HSTP	Health System Transformation Plan
ICC	Interagency Coordinating Committee
IDP	Internally displaced persons
IRC	Independent Review Committee
IRMMA	Identify, reach, monitor, measure and advocate
JA	Joint appraisal
LMC	Leadership management and coordination
MoH	Ministry of Health
MPM	Monitoring and Performance Management
MSD	Multi-stakeholder dialogue
PIRI	Periodic intensification of routine immunisation
PM	Programme manager
REACH	Reaching Every Child in Humanitarian Consortium
REC	Reach every child
RED	Reach every district
RI	Routine immunisation
SCM	Senior country manager
SDG PF	Sustainable Development Goals Performance Fund
TCA	Targeted Country Assistance
ToC	Theory of change
ZD	Zero-dose
ZIP	Zero-dose Immunisation Programme

1 Context

Health system context

Ethiopia is the second most populous country in Africa, with an estimated population of 115 million. It is classified as a low-income country, with a gross domestic product (GDP) of USD 96 billion. Administratively, the country is divided into four levels – regions, zones, woredas (i.e., districts) and kebele (wards). Approximately one-fifth (20%) of the population lives in urban areas while the remaining 80% live in rural areas.[1]

Ethiopia's health system is jointly financed by a combination of donors (47%); the Ethiopian government (17%); out-of-pocket payments (36%); and other sources (1%).[2] Health service delivery is structured into three-tiers of care,[3] including:

- **Primary level health care**, which is provided to urban populations through health centres (roughly 1 per 40,000 people), and to rural populations through health posts (1 per 3,000–5,000 people), health centres (1 per 15,000–25,000 people), and primary hospitals (60,000–100,000 people).
- **Secondary health care**, which is provided by general hospitals with roughly 1 per 1–1.5 million people.
- **Tertiary health care**, which is provided by specialised hospitals with roughly 1 per 3.5–5.0 million people.

All levels of the health system are supposed to provide vaccination services, with coordination organised at various levels including the federal, regional, zonal and woreda level.[4]

Gavi support

Ethiopia is classified by Gavi as a "high impact" country, meaning it is critical to reaching Gavi's ambitious global zero-dose (ZD) goals within the 2021–2025 strategic operating window, due to its large share of ZD children. As of 2021, Ethiopia had achieved a 70% diphtheria-tetanus-polio[1] (DTP1) coverage rate, vaccinating over 1.1m ZD children against this life-threatening disease. This figure represents a significant contribution to the almost 18 million ZD children identified globally. Effectively reaching ZD children in Ethiopia is therefore crucial for achieving Gavi's overall 5.0 Strategy, and is a key reason why Ethiopia was selected as one of the country case studies for this evaluation.

[1] Columbia Mailman School of Public Health. Ethiopia l Summary. Retrieved 09/10/23: https://www.publichealth.columbia.edu/research/others/comparative-health-policy-library/ethiopia-summary#:~:text=The%20government%20has%20public%20health,to%20address%20these%20emerging%20diseases.
[2] Ibid.
[3] Ethiopia's Immunisation Full Portfolio Planning (FPP) Documentation. December 2022. Ministry of Health Ethiopia and Gavi. Internal Gavi documentation.
[4] Ibid.

Summary

Under Gavi 4.0, Ethiopia had access to the following funds:

- **Health System Strengthening (HSS3)** funds, initially applied for in October 2015,[5] and approved by the Independent Review Committee (IRC) in November 2015.[6] This comprised USD 75,169,000, which was transferred to the Sustainable Development Goals Performance Fund (SDG PF – see section 1.3), and a further USD 4,971,000 which was reallocated to the Covid-19 response.

- **Additional HSS3**[7] funds were applied for, reprogrammed, or reallocated to the Ethiopia Ministry of Health (MoH) for earmarked activities; this includes:
  - 'Additional HSS Funds' of USD 23.5 million.
  - 'Increased HSS ceiling' of USD 15 million.
  - 'Reprogrammed HSS3 funds for Periodic Intensification of Routine Immunisation (PIRI)' of USD 5 million.
  - Reallocation of unutilised HSS3 funds towards COVID-19 in 2020 of USD 4,971,000.

- **Cold-Chain Equipment Optimisation Platform (CCEOP)** funds, which are transferred directly to United Nations Children's Fund (UNICEF) for cold-chain equipment (CCE) procurement. This comprised USD 26,094,580, of which Gavi covered 80%, and the Ethiopia MoH covered 20%.

- **Targeted Country Assistance (TCA)** funds, which are applied for yearly by core and expanded partners and disbursed from Gavi directly to partners. Exact amounts for each year are detailed in Table 1.1.

Under Gavi 5.0, the IRC has approved the following funds:

- HSS4 funds of USD 99 million, of which 70% will be disbursed directly to the SDG PF as an 'unearmarked contribution.' The remaining 30% will be disbursed mainly to the Ethiopia MoH and a sub-set of partners towards earmarked activities.

- Equity Accelerator Funds (EAF) of USD 44 million, which will be disbursed mainly to the Ethiopia MoH and a sub-set of partners towards earmarked activities.

- TCA funds of USD 15 million, which will be disbursed directly to implementing partners.

Table 1.1 shows the grants Ethiopia has had access to under Gavi 4.0 and the planned 5.0 period.

[5] Gavi. Health System Strengthening (HSS) Cash Support. 8 September/12 October 2015. Retrieved 27/09/23: https://www.gavi.org/sites/default/files/document/proposal-for-hss-support--ethiopia%282%29doc.doc
[6] Independent Review Committee Country Report. Gavi Secretariat, Geneva. 9-20 November 2015. Country: Ethiopia. *Gavi internal document.*
[7] Gavi. Multi-stakeholder dialogue: Immunisation planning in light of COVID-19. *Gavi internal documentation.*

Table 1.1: Grants received and applied for by Ethiopia under Gavi 4.0 and 5.0

Type of support	Amount approved (USD)	Time period
Gavi 4.0 grants		
HSS3 (SDG PF) – includes USD4.9 million reallocated towards COVID-19	80,590,000	2016–2023
HSS3 increased HSS ceiling (MoH)	15,209,826	2018–2020
HSS3 funds reprogrammed for PIRI, (MoH)	5,136,057	2018–2023
HSS3 flexibility for additional funds[8] (MoH)	23,500,000	2018–2923
CCEOP	26,094,580[9] (80% from Gavi)	2018–2023
TCA grants applied for outside of full portfolio planning (FPP) process		
TCA 2018[10]	4,259,172	2018
TCA 2019[11]	4,159,809	2019
TCA 2020[12]	3,847,142	2020
TCA 2021[13]	5,005,000	2021
TCA 2022[14]	5,000,000	2022
Gavi 5.0/5.1 grants		
HSS4	99,947,139	August 2023 – July 2026
EAF	44,180,347	August 2023 – July 2026
TCA	15,000,000	Jan 2023 – Dec 2025

[8] Independent Review Committee. IRC Country Report. 16 October 2019. Gavi.
[9] Ethiopia. Cold Chain Equipment Optimisation Platform Support. Decision Letter. Retrieved 14/03/24: https://www.gavi.org/sites/default/files/document/decision-letter-cceop-ethiopia-2018pdf.pdf
[10] Numbers represent actual spend and were provided internally by Gavi stakeholders
[11] Ibid
[12] Ibid
[13] TCA budget ceiling: Gavi. Targeted Country Assistance Plan 2021. Retrieved 29/09/23: Gavi. Targeted Country Assistance Plan 2018. Retrieved 29/09/23: https://www.gavi.org/sites/default/files/document/2021/2021-TCA-Plan-Ethiopia.pdf
[14] TCA budget ceiling: Independent Review Committee. IRC Country Report. 13-17 February 2023. Gavi.

Key stakeholders

Figure 1.2 (below) maps the key actors involved in Gavi 4.0 and 5.0 activities in Ethiopia, grouped into three main funding channels:

1. **The majority of HSS funds are disbursed directly from Gavi to the SDG PF.** This is a multi-donor fund with a single budget developed annually by the Ethiopia MoH according to national objectives and approved jointly with donors. The Grant Management Unit within the Ethiopia MoH is responsible for managing the SDG PF under both Gavi 4.0 and 5.0/5.1. In 2022, there are 14 contributors to the SDG PF with Gavi support representing 8% of total funds.[15] Under Gavi 4.0, nearly all of the original HSS3 funds (USD 75 million) were directed towards the SDG PF (this does not account for the additional funds which were applied for in 2018), and under Gavi 5.0, 70% of HSS4 funds (c. USD 70 million) will be directed towards the SDG PF.

2. **Other funds are disbursed directly by Gavi mainly to the Ethiopia MoH** and a small sub-set of other organisations (>5% of funds); under Gavi 4.0, this includes USD 43 million through HSS3, and under Gavi 5.0, this includes 30% of HSS4 funds (c. USD 39 million) and 100% of EAF funds (USD 44 million). Activities linked to these funds earmarked to specific investment areas, activities and objectives.

3. **TCA funds are disbursed directly from Gavi to core and expanded partners**; under Gavi 5.0, this will include USD 15 million.

In addition to the above funding channels, the CCEOP funds under Gavi 4.0 were disbursed directly from Gavi (80% of funds) and the Ethiopia MoH (20%) to UNICEF to procure CCE and other materials. Under Gavi 5.0, 10% of funds will be allocated to civil society organisations (CSOs) through Requests for Proposal. The funding channel for CSOs is planned to be an outsourced fund management mechanism which will competitively source local CSOs. Figure 1.2 also captures the expanded implementing partners under Gavi 5.0, for example, CHAI, PATH, JSI, CCRDA, and Acasus. In addition to these three main funding channels, approximately USD 3.8 million will be directed to specific woredas in Ethiopia via the Zero-dose Immunisation Programme (ZIP) through the Reaching Every Child in Humanitarian Consortium (REACH).

Country ZD theory of change

Under Gavi 4.0, the overall goal HSS3 was to support the framework of the Health System Transformation Plan (HSTP). Objectives of the HSTP include improving health status, community ownership, the efficiency and effectiveness in financial management, access to quality services, logistics and supply chain management, and enhance the use of technology and innovation. Gavi support to the HSTP was structured into three core activity areas:

1. **Improving child health service delivery though engagement of community**, CSO and non-state actors and strengthening of the primary level healthcare, mainly Health Extension Programme.

[15] Ministry of Health Ethiopia and Gavi. Supporting Narrative for the Full Portfolio Planning Theory of Change for GAVI Support Request, Ethiopia. *Gavi internal documentation.*

2. **Strengthening the capacity of the National Supply Chain System** though strengthening old Chain and Supply System, upgrading the network design, and strengthening the Vaccine and Vaccination Quality Regulatory System.

3. **Reinforcing the monitoring and evaluation system** through strengthening the Health Management Information System (HMIS) and Community Health Information System (CHIS), and performance reviews through different mechanisms.

In addition to the 2015 HSS3 funds, additional HSS3 funds were disbursed to the Ethiopia MoH to funnel into the following three programmatic areas:

1. **Increasing HSS3 data ceiling for data investments** including printing of health passports, implementation of electronic CHIS (procurement of tablets), and strengthening of DHSI2.[16]

2. **Reprogramming HSS3 funds from 'unutilised cash balance from old Gavi grants'[17] to PIRI funds** targeted to woredas with poor immunisation coverage for immunisation microplanning, supportive supervision, social mobilisation, outreach service delivery and review meetings activities.[18]

3. **Structuring HSS3 flexibility for additional funds**: USD 6.6 million disbursed for vehicles CCE for Ethiopian Pharmaceutical Supply Agency; a further USD 16.7 million was also disbursed.[19]

All of these aspects are still considered crucial, by Gavi stakeholders, for laying the groundwork necessary to effectively deliver the ZD agenda, while also keeping the vaccination agenda on the government's priority list (see Chapter 2: Findings).

Gavi 5.0 saw a shift in focus – from targeting national-level issues, to activities aimed at addressing more detailed sub-national and local issues (e.g., through microplanning). The activities listed under the Ethiopia Gavi 5.0 Theory of Change (ToC) are numerous (see Figure 1.3), with 10 broad investment areas and over 150 specific objectives. The central premise however, is that the ToC explicitly address actors and geographies specifically linked to both supply and demand related vaccination uptake issues, for example: pastoralist, mobile, remote/rural, and hard-to-reach populations; areas affected by conflict and insecurity; internally displaced persons (IDPs); and urban slums. Gavi's ToC graphic also outlines the overarching grant design and implementation processes (i.e., the Full Portfolio Planning [FPP], etc.), as well as overall planned activities for the 5.0 implementation period (1 January 2023 – 31 December 2025 in Ethiopia).

List of other interventions happening in-country

There are a number of other interventions, strategies, and policies, identified during the document review and interviews, that are outside of the immediate focus of this report, but are relevant to and impact on the Zero Dose agenda. At the national level, these include:

[16] Multi-Stakeholder Dialogue, 2020: Ethiopia. *Internal Gavi Documentation.*
[17] Ethiopia Joint Appraisal, 2019. Retrieved 02/10/23: https://www.gavi.org/sites/default/files/document/2020/Ethiopia%20Joint%20Appraisal%202019.pdf
[18] Multi-Stakeholder Dialogue, 2020: Ethiopia. *Internal Gavi Documentation.*
[19] Ibid

- **Health Sector Transformation Plan II (2021–2025):** Setting out goals to improve equity, coverage and quality of essential health services, and enhance the implementation capacity of the health sector at all levels.
- **Comprehensive Multi-Year Plan (2021–2025**): Prepared based on experiences gained in the implementation of the Expanded Programme on Immunisation (EPI), the National Health Equity and Quality Strategic Plans, Gavi 5.0, the Immunisation Agenda, and WHO technical immunisation guidelines.
- **Zero-dose Immunisation Programme (ZIP)** which includes Ethiopia and is being delivered by the International Rescue Committee. This includes USD 3.8 million being delivered in c.100 woredas.

Data collection timeline

Data collection activities included the following:

- **Initial introductory call** with the Ethiopia senior country manager (SCM), which took place on 2 May 2023
- **Document review** which took place between April and June 2023
- **Interviews with stakeholders**, which took place between May and July 2023
- **Final phone call** with the Ethiopia SCM, which took place on 6 September 2023.
- **Analysis** took place from the end of July to the beginning of August, while the write-up took place near the end of August 2023.

Figure 1.2: Timeline of Gavi 4.0 and 5.0 grants in Ethiopia (excluding Vaccine Introduction Grants)

D: design; R: review; A: approval; DB: disbursement; I: implementation; C: closure

Figure 1.3: Key actors in Ethiopia under Gavi 4.0 and Gavi 5.0

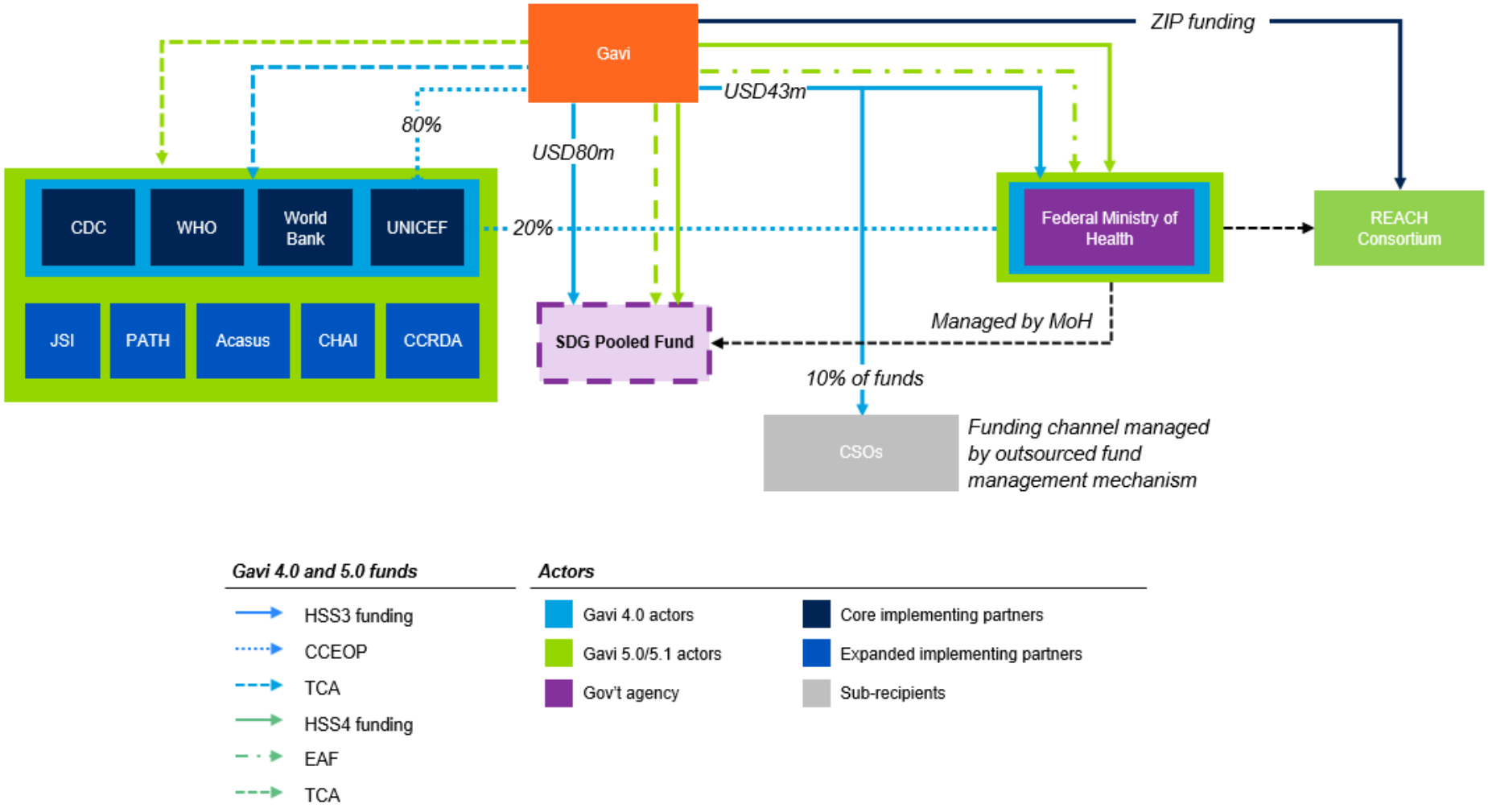
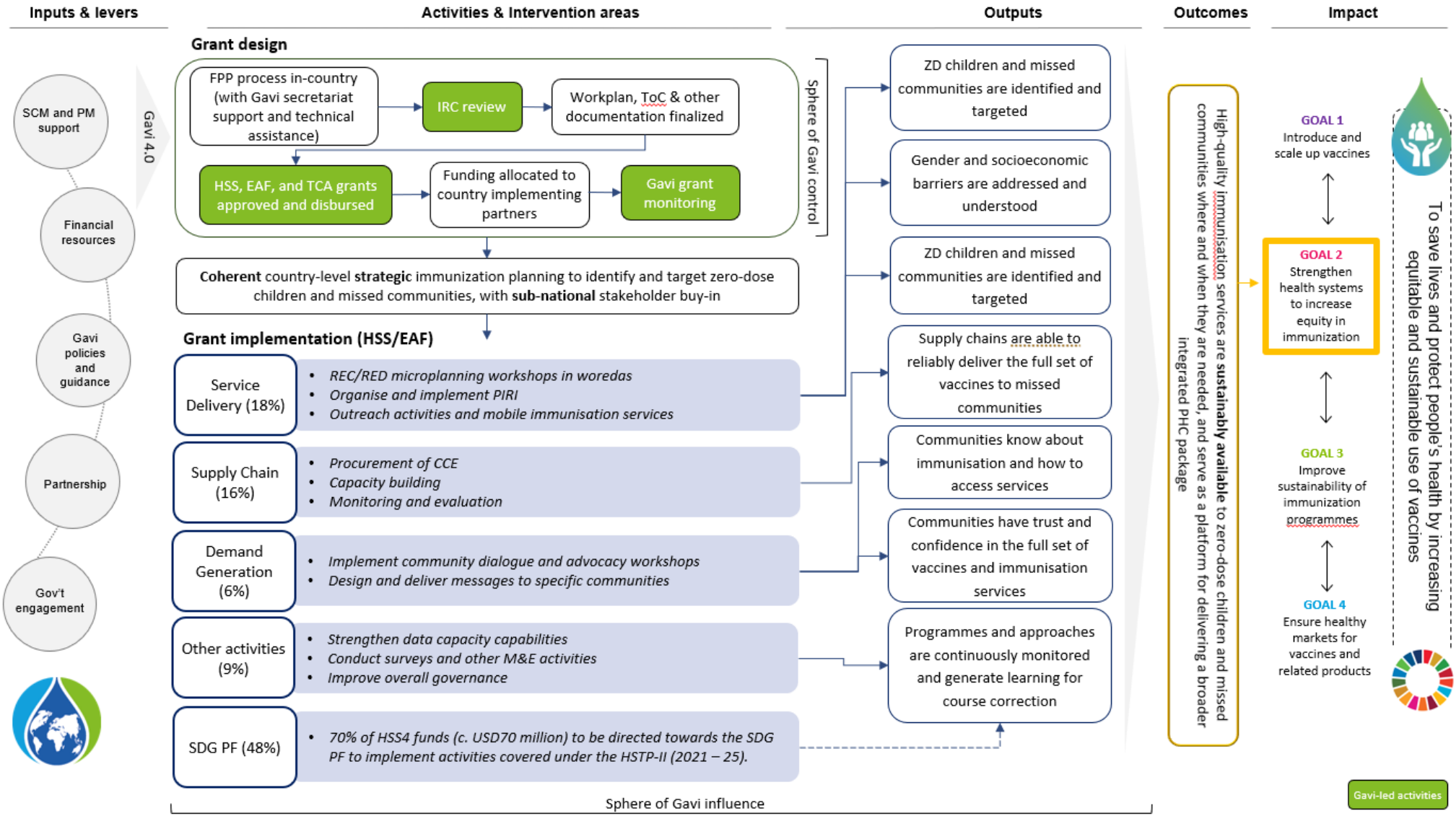


Figure 1.4: Ethiopia theory of change for Gavi 5.0



2 Findings

Objective 1: Relevance and coherence of Gavi's ZD agenda

EQ1. How relevant is Gavi 5.0/5.1's focus on ZD children and missed communities to countries' needs?

Summary of findings	• The ZD agenda is relevant to Ethiopia's needs given overall levels of ZD children and the impact of COVID-19 on DTP1 coverage. • Data quality is an issue in identifying where ZD communities are located; to address this, the FPP process drew on multiple data sources including an evaluation from Project HOPE. • The approach outlined in the FPP document appears to be relevant to the specific ZD needs within Ethiopia.			
Strength of the evidence	**1**	**2**	**3**	**4**
Rationale for this judgement	Evidence comprises multiple data sources, including quantitative data, academic studies, country-level and Gavi documentation, and qualitative interviews. There is good triangulation.			

From a global perspective, Gavi's focus on ZD children and missed communities is relevant in Ethiopia when looking at the overall proportion of ZD children. Ethiopia has one of the highest number and proportion of ZD children of all Gavi-eligible countries. As per the FPP Situational Analysis, the estimated number of ZD children is 1.2 million, accounting for 1% of the total population. This places Ethiopia second in the Immunisation Agenda 2030 (IA2030)'s list of priority countries.

Compounding crises have led to substantial physical destruction of Ethiopia's health system; the Ethiopia MoH aims to strengthen primary healthcare with a priority on equity and maternal and child health. The re-emergence of conflict in certain regions have led to substantial destruction of the health system; alongside other factors, this has exacerbated inequities across the country. Equity is at the heart of the HSTP-II and listed as one of its '14 strategic directions' and the 'transformation agenda'. Other areas of focus include moving towards universal health coverage, protecting people from health emergencies, a transformation of the country's primary healthcare (woredas) and improving health system responsiveness. A large proportion of the targets focus on maternal, newborn and child health, and disease prevention and control, the former of which is considered a 'serious issue' by the Ethiopia MoH.[20]

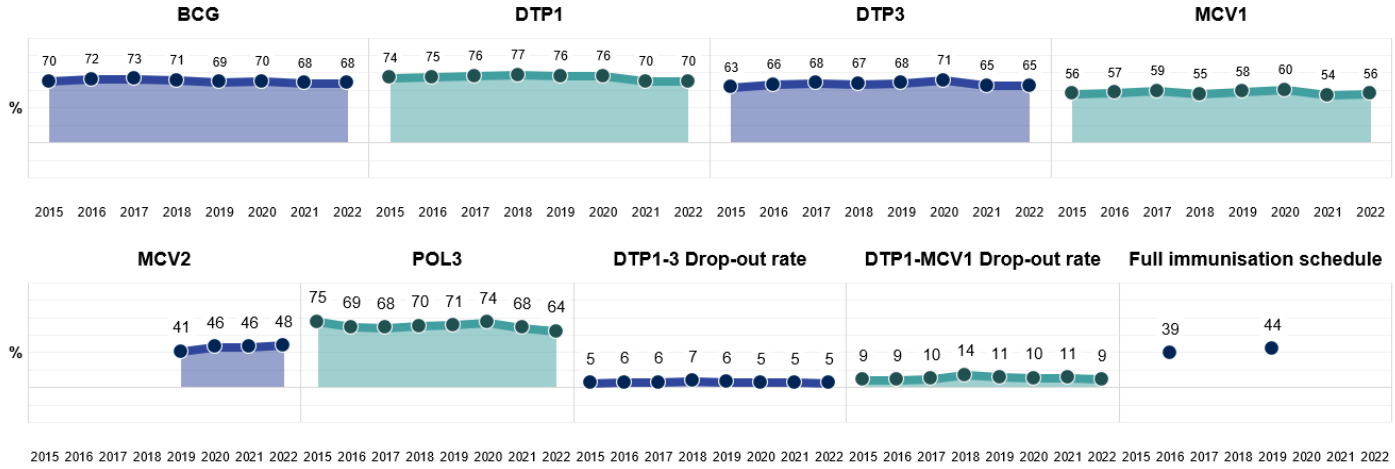
The ZD agenda is relevant to Ethiopia's vaccination needs particularly in terms of addressing inequities; still, there are other pressing areas, including increasing coverage of specific antigens and the full immunisation schedule. As of 2022, DTP1 has the highest coverage (70%) of

[20] Columbia Mailman School of Public Health. Ethiopia I Summary. Retrieved 09/10/23: https://www.publichealth.columbia.edu/research/others/comparative-health-policy-library/ethiopia-summary#:~:text=The%20government%20has%20public%20health,to%20address%20these%20emerging%20diseases.

> "[T]he zero-dose is an equity issue, and Ethiopia has always had a concern around equity. So we may not be talking about equity, we may be talking about zero-dose, but it's still an issue of equity, it's still ensuring that those who are not reached whether they're zero dosed or whether they're unvaccinated are reached." Strategic respondent, interview

the vaccine indicators assessed; the lowest coverage is for MCV2 (48%). Drop-out rates between DTP1 and DTP3 (a proxy indicator of service delivery) and DTP1 and MCV1 (a proxy indicator of programme effectiveness) are relatively low (5% and 9%, respectively). While up-to-date data on the full immunisation[21] schedule is not available, the most recent coverage from 2019 shows 44% coverage – well-below the government target of 90% by 2025. Coverage of all indicators vary significantly by region, necessitating a focus on equity.

Figure 2.1: Select vaccine coverage (WUENIC), full immunisation schedule,[22] and drop-outs (WUENIC) in Ethiopia: 2015–2022



> "Covid did affect immunisation as a whole because we know service delivery points were closed for a short while. We know that health workers were scared, communities were scared so there was some impact. Speaking realistically on the side of Ethiopia, we believe that the Northern conflicts that we had really contributed to the zero-dose agenda more than the Covid pandemic." Strategic respondent, interview

COVID-19 had a substantial impact on the number of ZD children; stakeholders reported that this contributed to increased vaccine hesitancy and delays in implementing the ZD agenda. While Ethiopia saw gains in DTP1 coverage pre-pandemic, these have fallen substantially and have yet to recover post-COVID-19 (see Figure 2.1). Stakeholders reported that COVID-19 had the biggest impact on increasing demand-side barriers, noting that healthcare workers themselves were at times not getting vaccinated – contributing to vaccine hesitancy. They also explained that the focus during this period was on COVID-19 vaccinations, meaning other vaccination priorities, including ZD and routine immunisation (RI) dropped down the agenda with other vaccine programmes delayed. While noting the impact of the COVID-19 pandemic, a sub-set stakeholder explained that other contextual issues, specifically the re-emergence of conflict, had a larger impact on the ZD agenda than COVID-19. During COVID-19, just under USD 5 million of the remaining HSS grant was reallocated to

[21] In Ethiopia, routine immunisation includes BCG, PCV, OPV, IPV, DPT-Hib-HepB, TT, MCV, Rotavirus and HPV.
[22] Yibeltal et al. (2022). Trends, projection and inequalities in full immunization coverage in Ethiopia: in the period 2000–2019. *BMC Pediatrics,22(193).* doi: https://doi.org/10.1186/s12887-022-03250-0

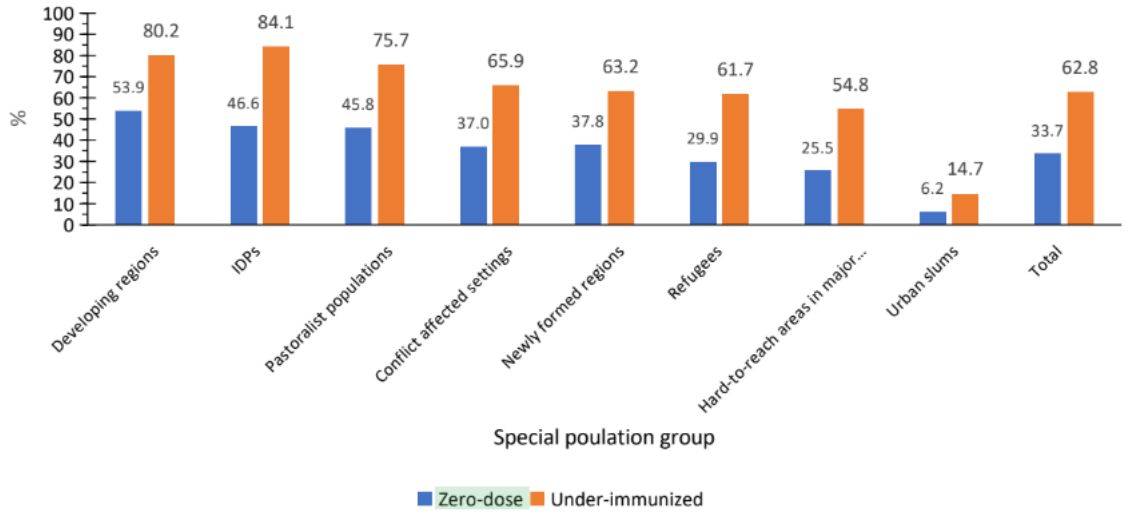
COVID-19 activities, including infection control supplies, risk and behavioural communication, and community, civil society, and media engagement activities.[23]

The quality and availability of data is a barrier to identifying ZD children and missed communities accurately at the sub-national level. The DHIS2, which is used by the Ethiopia MoH to collect and analyse health data, has noted denominator issues as these are based on the most recent 2007 census, meaning coverage estimates are often inflated.[24] In addition to denominator issues, it is nearly impossible to collect data in certain states (notably Tigray) due to the re-emergence of conflict and lack of infrastructure, including health posts and roads.[25] WUENIC data is considered more accurate, yet does not drill down to the sub-national level. The FPP notes these limitations and references various data sources in its identification of ZD communities. The key basis for identifying ZD communities comes from an evaluation conducted by Project HOPE in 2022. This project employed a mixed-methods approach, including situational and geospatial analysis, sample questionnaires, key-informant interviews and focus group discussions.[26] The reader should therefore note that all findings in terms of the sub-geographic relevance of the ZD agenda in Ethiopia needs to be caveated due to discrepancies between various data sources.

ZD children and missed communities in Ethiopia are dispersed across a wide range of contexts and geographies. The Project HOPE ZD evaluation study found a high prevalence of ZD and under-immunised children in hard-to-reach and undeserved settings; particularly in developing regions, among IDPs, pastoralist populations and conflict-affected settings (see Figure 2.2 below). In terms of overall contribution to ZD, the evaluation found conflict-affected areas have the highest contribution (221,458), followed by pastoralist populations (181,515) and developing regions (174,429); contributions of IDPs was relatively lower (37,860). In terms of geographies, the regions with the highest percentage of ZD children are Afar (16%), Oromia (10%), Gambella (9%), and Somali (9%).

[23] Multi-Stakeholder Dialogue, 2020: Ethiopia. *Internal Gavi Documentation.*
[24] Ministry of Health Ethiopia and Gavi. Supporting Narrative for the Full Portfolio Planning Theory of Change for GAVI Support Request, Ethiopia. *Gavi internal documentation.*
[25] Ibid.
[26] Project Hope. Report: Reaching Zero-Dose and Under-Immunized Children in Remote and underserved Settings of Ethiopia: Evaluation. *Project Hope.* Retrieved from 29/09/23: https://www.projecthope.org/resource/reaching-zero-dose-and-under-immunized-children-in-remote-and-underserved-settings-of-ethiopia-evaluation/

Figure 2.2: Percentage of ZD in hard-to-reach and undeserved settings[27]



Gavi 5.0 grants will target roughly half all woredas in Ethiopia based on a systematic ZD prioritisation exercise which includes ZD indicators and contextual priorities. Indicators which fed into this prioritisation activity include the number of ZD children per woreda (scale from 1 to 5) and vaccine-preventable disease outbreak situation (scale from 1 to 3). Contextual situations were also considered, including whether it was conflict-affected (0 to 3), pastoralist (0 or 1) and drought-affected (0 or 1). Immunisation data quality was also considered, with those experiencing 'significant data quality challenges' given a score of 1 and 0 for the rest. ZD woredas in urban slums were deprioritised from the FPP. Given the contextual situation in Ethiopia, this approach seems appropriate for prioritising ZD woredas, and the IRC committee deemed it to be *'technically sound and appropriate'*.[28]

The 'root cause analysis' found multiple reasons contributing to ZD children and missed communities in Ethiopia. The FPP and Project HOPE evaluation notes several contextual, demand, and supply-side barriers, including the re-emergence of conflict and drought, lack of infrastructure in remote areas, socioeconomic and gender-linked barriers, and vaccine hesitancy. There does not appear to be data which systematically assesses which of these barriers has the highest contribution, and the FPP does not note which states or woredas experience the greatest barriers. Stakeholders overwhelmingly held that the re-emergence of conflict had triggered (or exacerbated) these barriers.

Gavi 5.0 funded activities will therefore tailor ZD solutions based on different contexts, i.e., pastoralist, conflict affected populations, IDPs, and urban slums. These will be adapted at the community level, with the specific strategies summarised as follows:

- **For pastoralist, mobile, remote/rural and hard-to-reach populations**, each woreda will map influential and religious leaders, engage healthcare leaders, community health platform focal points, and CSOs during the microplanning exercise to help identify ZD and design context-specific solution and outreach activities.

- **In areas affected by conflict and insecurity**, key stakeholders include the security apparatus and humanitarian agencies; therefore, all activities will be planned and monitored with their 'full

[27] Ibid.
[28] Independent Review Committee. IRC Country Report. Ethiopia. In-country review. 13-17 February 2023. Gavi.

engagement'. Activities largely centre around implementing 'catch-up' immunisation sessions and PIRI, alongside rehabilitating CCE.

- **For IDPs**, the project will fully engage the National Disaster and Risk Management Commission to integrate immunisation activities with other services and strengthen surveillance activities.

- **Urban slum areas** remain a focus (despite being deprioritised from the FPP process) and the ToC narrative details activities to be implemented in urban slum areas. This includes demand generation activities through local media, strengthening community platforms, and engaging other sectors and collaborating with organisations to help expand immunisation services.

The IRC review does not comment on these context-specific strategies in the ToC narrative.[29] However, context-specific approaches seem appropriate given the reasons for ZD and missed communities are highly contextual and varied within Ethiopia.[30] Subsequent phases of the evaluation will explore how these different strategies work in practice.

Box 1. The IRMMA framework

There is limited evidence on the effectiveness of the IRMMA framework in Ethiopia; as one respondent explained, the extent to which it helped develop context-appropriate solutions '*remains to be seen'.* Generally, however, respondents who were aware of the tool considered it to be a sensible approach in principle. They highlighted how the IRMMA framework had been embedded within the approach of core partners. One interviewee reported that the 'Identify' aspect of the framework was especially useful as it helped move country teams towards data-driven tools (e.g., away from hand-drawn maps to Geospatial Technologies). One respondent explained that the IRMMA framework was more embedded within core partners and that government stakeholders have not been following it as much due to it not being applicable to other priorities outside of ZD.

[29] Ibid.
[30] Project Hope. Report: Reaching Zero-Dose and Under-Immunized Children in Remote and underserved Settings of Ethiopia: Evaluation. Project Hope. Retrieved from 29/09/23: https://www.projecthope.org/resource/reaching-zero-dose-and-under-immunized-children-in-remote-and-underserved-settings-of-ethiopia-evaluation/

EQ2. How relevant are the Gavi funding levers to the needs of countries with regard to reaching ZD children and missed communities?

Summary of findings	• A sizeable proportion of funds (100% of initial HSS3 funds and 70% of HSS4 funds) are directed towards the SDG PF making it difficult to accurately assess relevance. It is not possible to assess the relevance of the 70% of HSS4 funds directed towards the SDG PF as the activities funded through Gavi funding is not known. The reader should note that this is by design of the pooled fund, with all doner funds contributing towards a similar set of outputs and outcomes. • HSS4 and EAF funds are shown as contributing towards the same outcomes in the FPP budget and are not differentiated by most stakeholders. • The activities funded through the remaining 30% of HSS4 funds and EAF appear to be relevant to the needs identified in EQ1, although relatively less is funded towards demand-side activities.
Strength of the evidence	1 | **2** | 3 | 4
Rationale for this judgement	Evidence comprises multiple data sources of lesser quality, including qualitative interviews, country-level documents, and internal Gavi documents. There is good triangulation.

While relevant in theory, it is not possible to assess the relevance of funding channelled through the SDG PF under Gavi 4.0; there is inadequate documentation to assess whether the remaining USD 43 million directed towards the Ethiopia MoH was relevant. Funds directed to the SDG PF are not earmarked, and instead used to implement activities covered under the Health System Transformation Plan II (2021–2025). Based on the activities outlined in the initial proposal, activities should theoretically be relevant; however, without proper documentation, it's difficult to assess whether they were relevant in practice. Where activities were disbursed to the Ethiopia MoH and ring-fenced around specific activities, the evaluation is limited by a lack of documentation and data, and evaluators note inconsistencies in reporting this data across various documents (see Annex). The Multi-Stakeholder Dialogue (MSD) 2020 outlines specific outputs that funds would be directed towards through this funding; however, it is noted that a relatively small proportion of these funds had been expended at the time of this assessment.[31]

The country level perspective suggests Gavi 4.0 TCA funding was relevant to Ethiopia's vaccination needs. Respondents specifically pointed towards the TCA funding as being relevant to the vaccination needs within Ethiopia. This was reportedly due to the yearly application and disbursement cycles; one respondent reported that every year, their organisation sets priorities with the Ethiopia MoH and then applies for TCA funding on this basis. This further ensures a degree of flexibility and allows the funds to be adapted to the current needs in Ethiopia. Despite this agreement among respondents, a previous meta review from IOD Parc found that the yearly planning

> "We have been benefiting from the [TCA], for as long as I know. With those funding, we have been able to conduct community service. We've been able to roll out a package of various interventions, strengthen microplanning and [identify] the communities that are left out of reach."
> Strategic respondent, in-depth interview

[31] Gavi. Multi-stakeholder dialogue: Immunisation planning in light of COVID-19. *Gavi internal documentation.*

cycles of TCA funds are not conducive to sustainable activities and outcomes.[32]

Gavi 5.0 funding levers are considered relevant; however, the country-level perspective did not consider the grant ceiling enough to address current ZD needs in Ethiopia. The ceiling for Gavi 5.0 is USD 183 million, which equals roughly USD 173 allocated per ZD child over the 5.0 period. While previous reviews have noted that it is nearly impossible to assess the cost of reaching ZD children specifically, interviewees reported that the overall funds are not enough to reach all ZD children in Ethiopia.

There is little distinction between the different Gavi 5.0 funding levers other than their disbursement channels. The HSS4, EAF, and TCA funds were applied for together under the FPP process. 70% of the HSS4 funds will be directed towards the SDG PF, while the remaining 30%, alongside 100% of EAF funds, will be directed mainly towards the Ethiopia MoH, as well as a sub-set of partners and CSOs. TCA funds will be disbursed directly to core and expanded partners. Despite their different names and distinct funding channels, respondents held the view that funds (specifically the HSS4 and EAF funds) worked together to realise the outputs and outcomes detailed in the programme ToC. Indeed, in Ethiopia programme documentation, HSS4 and EAF funds are often bundled together and referred to as HSS/EAF funds.

The funding channel for TCA funds may be leading to incoherent activities among core and expanded implementing partners. TCA funds are disbursed directly from Gavi to core and expanded partners without having to pass through either the Ethiopia MoH or the SDG PF. Activities included under these grants are numerous; for example, the TCA 2021 Plan lists about100 activities delivered by 10 different partners.[33] While anecdotal evidence from respondents suggests that some TCA activities are planned in coordination with the Ethiopia MoH, it is unclear the degree to which this is taking place across all partners and no formal coordination mechanism was identified. The latter point is supported by a meta review from IOD Parc which found that there is '*no specific TCA coordination platform'* in Ethiopia.[34] Indeed, this evaluation found anecdotal evidence from stakeholders which suggests activities falling under TCA funding are not clearly communicated to the Ethiopia MoH.

70% of Gavi 5.0 HSS4 funds will be directed towards the SDG PF, again making it difficult to accurately assess whether these will be relevant to Ethiopia's ZD needs. The FPP application does not provide any detail as to what the intended activities of the SDG PF-directed funds are, and the FPP budget list the sole objective under the USD 70 million directed towards the SDG PF as 'results-based financing'.[35,36] Instead, the fund is working towards specific outcomes, including strengthening PHC and improving DTP3 vaccinations; therefore, the fund is in some respects relevant to the ZD agenda via these proxy outcomes. However, the specific activities being implemented with the Gavi-portion of the funds is not known. This has implications for the evaluation, particularly the evaluation team's ability to accurately assess the contribution of these funds towards the ZD agenda in subsequent years.

[32] IOD PARC. Gavi PEF TCA Country Assessments: Meta Review (Draft). 13 February 2020.
[33] Gavi. Targeted Country Assistance Plan 2021. Retrieved 29/09/23: Gavi. Targeted Country Assistance Plan 2018. Retrieved 29/09/23: https://www.gavi.org/sites/default/files/document/2021/2021-TCA-Plan-Ethiopia.pdf
[34] IOD PARC. Gavi PEF TCA Country Assessments: Meta Review (Draft). 13 February 2020.
[35] Federal Ministry of Health and Gavi. Supporting narrative for the theory of change. Ethiopia 22 September 2022. *Gavi internal documentation.*
[36] Gavi Ethiopia FPP Budget. 2 Jan 2023. *Gavi internal documentation.*

The remaining 30% of Gavi 5.0 HSS4 funds (USD 30 million), as well as 100% of EAF funds (USD 44 million), will go directly to the Ethiopia MoH and other actors for ring-fenced activities. Based on the FPP Ethiopia budget, the top investment areas (other than the SDG PF funding) are 'service delivery' (USD 25 million), 'supply chain' (USD 25 million), and 'demand generation' (USD 11 million); inclusive of SDG PF, by far the largest proportion of funds are directed towards 'Extend and Reach' activities (USD 124 million or 84% of the budget).[37] When looking at specific activities, the earmarked funding will be directed towards monthly outreach/PIRI/catch-up campaigns in 447 woredas (USD 15 million) and procuring CCE (USD 12 million).[38] These funding channels are relevant to the supply-side barriers noted in the FPP document. Although there is a larger question around sustainability of PIRI campaigns and their long-term effectiveness, if delivered alongside other vaccination activities, research suggests the combined results could lead to successful results in the long term.[39,40] Comparatively less of the budget has been directed towards demand-side activities (USD 8 million), which has been noted as a key barrier towards effective vaccine uptake in Ethiopia (see previous section EQ1). The degree to which these 'investment areas' address Ethiopia's ZD vaccination needs will be explored in subsequent years of the evaluation.

> "Gavi sometimes gives the support and grant to some implementing partners without clear communication with us. So once they are granted and got the grant, they came to us for the implementation. So, we need to be aware of that, and conscious of that." Strategic respondent interview

Aspects of CSO engagement, including how they will be utilised, have been defined; however, the exact CSOs have not been identified. Under Gavi 5.0 grants, CSOs will be involved in service delivery, supply and logistics, demand creation, and programme management activities. Their exact involvement will vary depending on each woreda, and this will be further defined during microplanning and mobilisation. Accordingly, the exact CSOs who will be involved have not yet been identified. However, the FPP document notes they will identify CSOs through the Consortium of Christian Relief and Development Associations, which has 456 registered local CSOs (who were identified in an additional document), as well as CSOs who were also engaged as part of the FPP process.[41] The IRC review reports that CSOs are mentioned as implementers for 'only two community-focused activities' totalling USD 3.3 million, which is less than the 10% CSO threshold.[42]

There was lack of uniformity in the country-level perspective as to whether Gavi funds are flexible. Some stakeholders felt that the delays to the 5.0 Strategy meant there was minimal time to adapt interventions if needed, while another felt the co-financing mechanism was not flexible. However, other stakeholders felt their funding mechanisms were flexible, noting extensions of the previous Gavi 4.0 HSS3 grants, as well as the yearly application and disbursement cycle of TCA funds. The FPP document also notes that prioritisation of woredas can change if they become overfunded or other changes occur. Without proper documentation (see Annex) it is difficult to accurately assess this finding.

[37] Ibid.
[38] Independent Review Committee. IRC Country Report. Ethiopia. In-country review. 13-17 February 2023. Gavi.
[39] Clarke-Deelder et al. (2021). Impact of campaign-style delivery of routine vaccines: A quasi-experimental evaluation using routine health services data in India. *Health Policy and Planning, 2021. Vol 36(4).* Doi: 10/1093/heapol/czab026.
[40] Summan, A., Nandi, A., Deo, S. and Laxminarayan, R. (2021). Improving vaccination coverage and timeliness through periodic intensification of routine immunization: evidence from Mission Indradhanush. *Annals of the New York Academy of Sciences, 1502(1).* doi: 10.111/nyas.14657
[41] Federal Ministry of Health and Gavi. Supporting Narrative for the Theory of change. Ethiopia 22 September 2022. *Gavi internal documentation.*
[42] Independent Review Committee. IRC Country Report. Ethiopia. In-country review. 13–17 February 2023. Gavi.

EQ3. How coherent is Gavi's ZD agenda with other international and national actors' focus?

Summary of findings	• The Gavi 5.0 strategy is coherent with the focus of the national government, particularly the comprehensive Multi-Year Plan (cMYP 2021–2025), and to a lesser degree, the HSTP-II (2021–2025). • The Gavi 5.0 Strategy is coherent with wider partners due to purposeful alignment with the Ethiopia MoH strategy and other international strategies i.e. IA2030. • There are coordinating mechanisms in place for Gavi 5.0 activities and the ZIP and the degree to which these function in practice will be explored in subsequent years of the evaluation.
Strength of the evidence	**1** | **2** (selected) | **3** | **4**
Rationale for this judgement	Evidence comprises multiple data sources which are mainly qualitative, including government documents, Gavi documents, and qualitative interviews. Good triangulation.

The Gavi 5.0 strategy is coherent with national level immunisation plans, particularly the comprehensive Multi-Year Plan (cMYP 2021–2025) and to a lesser extent, the HTSP-II 2021–2025.
The ZD agenda is coherent with the overarching goals of the cMYP (2021–2025)[43] based on:

- The objectives of the plan, including to 'leave no one behind, by increasing equitable access and use of new and existing vaccines' and 'ensure good health and wellbeing for everyone by strengthening immunisation within primary healthcare and contribute to universal health coverage and sustainable development'.
- Strategic approaches, including the 'reach every district (RED)/Reach Every Child/Community (REC) approach' (which details a bottom-up, microplanning approach with Woredas), 'leave no one behind', and 'equity and access' (which explicitly mentions actively seeking out ZD and under-immunised target populations).
- Targets to achieve Pentavalent 1 coverage 100% nationally by 2025.

There does not appear to be any obvious areas of the cMYP (2021–2025) which are incoherent with the plan, although it is noted that the plan was finalised *'before the country faced various natural and human made disasters and before significant declines in RI performance were demonstrated.'*[44]

[43] Federal Ministry of Health. Ethiopia National Expanded Program on Immunization: Comprehensive Multi-Year Plan (2021-2025). *Federal Ministry of Health.* Retrieved 29/09/2023: http://repository.iifphc.org/bitstream/handle/123456789/1657/Ethiopia-National-Expanded-Program-on-Immunization.pdf?sequence=1&isAllowed=y

[44] Federal Ministry of Health and Gavi. Supporting Narrative for the Theory of change. Ethiopia 22 September 2022. *Gavi internal documentation.*

The ZD agenda is less coherent with the HSTP-II (2021–2025).[45] The plan focuses on RI and drop-out rates between Pentavalent 1 and 3; indeed, Pentavalent 1[46] coverage is not listed as an indicator, and instead the focus is on Pentavalent 3 coverage. Coherence with strategic areas of the HTSP-II is mixed: the Gavi ZD agenda shifts could be considered aligned with *'improving effective coverage of RI… implementation of RED/REC approach'* and *'design strategies to build demand [and] community participation'*; yet they are less aligned with strategic areas focusing on introducing new vaccines and integrating immunisation with other health services (although it is noted that these are wider principles within the overall Gavi 5.1 strategy). Some respondents viewed the ZD agenda as coherent with the HTSP-II as one of the plans' key priority areas is ensuring equity, although the broad definition of 'equity' was noted.

"[A]ddressing the vertical equity, mainly the socioeconomic, the equity that arises from socioeconomic status is not an easy, and Gavi's strategy will help the government to translate the strategies into actions. I think that is the most important aspect of the Gavi strategy."
Operational respondent, interview

"We're also expected to align with global agendas like, 2030 in Gavi. So it is aligned already and everything is aligned."
Operational respondent, interview

The Gavi 5.0 strategy is coherent with core and expanded partner strategies; this is facilitated by overarching alignment with government strategies and global immunisation agendas (i.e. IA2030). Respondents reported the ZD agenda is coherent with their own organisations' agendas. While partners such as the WHO and UNICEF are not always explicitly focused on ZD, their strategies are aligned with wider global strategies (such as IA2030), as well as country-level strategies such as the cMYP (2021–2025) and HTSP-II (2021–2025). This ensures a coherent strategic framework across non-national actors.

Leadership, management, and coordination (LMC) in Ethiopia is the responsibility of the MoH which engages with various immunisation platforms. This includes, the Interagency Coordinating Committee (ICC), National immunisation Technical Advisory Group, immunisation task force and five technical working groups. Strengths of the LMC noted in the FPP documentation include strong coordination at the national level, a coherent national policy environment, and increasing numbers of women leaders. Challenges include weaker mechanisms at the sub-national and implementation levels, 'sub-optimal' inter-sectoral and multi-sector collaboration, and low representation of women at the sub-national level.[47] How the LMC in Ethiopia facilitates the delivery of the ZD agenda will be explored in subsequent years of the evaluation.

The Ethiopia MoH will take a role in coordinating Gavi 5.0 activities with ZIP activities; however, it is unclear how this will work in practice. The FPP application notes that of the 534 FPP priority 1 woredas identified, 87 overlap with ZIP. These woredas are characterised as having 'a huge need' and that Gavi 5.1 funds can *"synergistically contribute to identifying and reaching zero-dose and under-immunised children in targeted areas".* It is envisioned that the Ethiopia MoH will play a role in ensuring efforts are not duplicated – for example, by providing selected support, i.e., procurement of motorcycles. How this plays out in practice will be a key area of enquiry for subsequent years of the evaluation.

[45] Federal Ministry of Health. Health Sector Transformation Plan II (2020/21 – 2024/25). Retrieved 29/09/23: http://repository.iifphc.org/handle/123456789/1414
[46] Noted that Gavi uses DTP1 targets.
[47] Federal Ministry of Health and Gavi. Supporting Narrative for the Theory of change. Ethiopia 22 September 2022. Gavi internal documentation.

Table 2.1: Total financial resources for immunisation by source[48]

Donor/ source	Main aims of health spending
Gavi	USD 158 million from 2021 to 2025
SDG PF	USD 160 million in 2019, aims to support the HSTP-II (2021–25)[49]
World bank	USD 908 million directed towards COVID-19 projects
Global Fund	USD 80 million committed through Resilient and Sustainable Systems for Health (RSSH)

Objective 2: Operationalisation of the ZD agenda

EQ4. To what extent have Gavi 5.0/5.1 funding levers, processes and guidance enabled countries to focus their Gavi support towards reaching ZD children and missed communities?

Summary of findings	• Absorption rates of previous Gavi 4.0 funds are slow; however, it is difficult to assess where this is occurring due to a lack of data. • While the Gavi 5.0 FPP process helped to coordinate stakeholders and ensure priorities were aligned, it was slower than anticipated and filling out Gavi documentation was reported to be a 'pain point'. • Most of the intended shifts under Gavi 5.0/5.1 are present in the FPP documentation, with the exception of aspects of the gender shift.			
Strength of the evidence	**1**	**2**	**3**	**4**
Rationale for this judgement	Evidence comprises of fewer data sources, including Gavi documentation and qualitative interviews. There is limited quantitative data to draw from. Despite this, there is good triangulation between the few data sources.			

"I'm recommending to Gavi team to improve the time it takes to process the contracts and to release the funds… there are some organisations which we are forced to stop their implementation and also go into another recruitment when they get another fund."
Operational respondent, interview

Gavi 4.0 absorption rates are slow, however, it is unclear where these delays are coming from based on the available data. It is difficult to properly evaluate this finding without supporting evidence from the Monitoring and Performance Management (MPM) dashboard, as the dashboard was lacking key indicators for Ethiopia specifically. The FPP Situational Analysis notes that Gavi funds disbursed to the Ethiopia MoH are then transferred to regions, then to zones, and then to woredas, suggesting multiple areas

[48] Tougher S, Mandalia N, Kou Griffiths U. Recovery of Routine Immunisation: Mapping External Financing Opportunities for Reaching Zero-Dose Children. Vaccines (Basel). 2023 Jun 26;11(7):1159. doi: 10.3390/vaccines11071159. PMID: 37514975; PMCID: PMC10383242.
[49] Audit Services Corporation. Sustainable Development Goals Performance Fund: Independent Auditor's Report and Financial Statements 7 July 2019. Retrieved 11/10/2023: https://documents1.worldbank.org/curated/en/191371600847299190/pdf/Ethiopia-audited-financial-statement-for-the-Health-MDG-program-July-7-2020-pdf.pdf

where funds could be delayed. Gavi documentation also notes slow dispersion times for previous Gavi 4.0 grants, including slow dispersion for the HSS3 PIRI grant – there is reference to the CCEOP grant being '*one year behind schedule'*.[50] Stakeholders reported that it takes a long time for Gavi to approve contracts, and noted delays to implementing funding levers such as the TCA plans, which are applied for on a yearly basis. A sub-set of stakeholders also noted that it takes a long time for Gavi to release TCA funds to implementing partners, but it is difficult to triangulate these claims without access to TCA disbursal times.

The FPP process was useful in terms of bringing together a wide range of stakeholders and planning the Gavi 5.0 grants. The FPP process in Ethiopia started in March 2022 under the leadership of the Ethiopia MoH.[51] An initial series of workshops and small working group sessions focused on the situational analysis, ToC, Gavi support details and budgeting, and brought together government officials and partners. Government officials included representatives from different departments within the Ethiopia MoH and other areas of government (e.g. the Food and Drug Administration). Representatives from partners included core partners, expanded partners, and additional NGOs operating in Ethiopia (e.g. Save the Children). Following this, a series of sub-national workshops were held to contextualise the FPP documents. Bringing together a wide range of partners for the situational analysis was noted as a key benefit by interviewees. The in-person meetings were felt to be *'critical'* to completing drafts of the documents and it was noted that it would *'not be possible to do this virtually.'*[52] Ongoing support from the Gavi secretariat (SCM and PM) was also noted as a key enabler by a sub-set of respondents.

> "[T]he FPP process. A huge situational analysis and a ToC was developed. It was a lengthy process because a lot of people were involved. I mean, there is a value to that."
> Strategic respondent, interview

Respondents noted that the FPP was a slow process that ran beyond the anticipated time frames. MPM data indicates that the FPP process was 11 months in duration, which is at the lower end of the time frames for the Country Case Studies selected for this evaluation (15 months). Still, Gavi documentation notes the time taken to implement process as a key area for improvement;[53] this is further evidenced by feedback from respondents, who reported that the long time frames cut into the Gavi 5.0 implementation phase (which is currently scheduled to end in December 2025).

Gavi documentation was also reported to be a 'pain point'. Specifically, the ToC template and budgeting tool were not considered user-friendly and completing these required guidance and support from a Gavi budget consultant.[54] This was echoed by interviewees, who reported that they were initially unaware the tools and how to use them, specifically citing difficulties to adapt to the Gavi format. Overall, interviewees explained that familiarising themselves with these tools was a steep learning curve.

[50] Independent Review committee. IRC Country Report. 16 October 2019. *Gavi internal document.*
[51] Minutes of E-ICC Meeting on 09 Nov 2022, Ministry of Health, Ethiopia. *Gavi internal document.*
[52] Ethiopia's Immunization Full Portfolio Planning (FPP) Documentation. December 2022. *Ministry of Health Ethiopia and Gavi. Internal Gavi documentation.*
[53] Ibid
[54] Ibid

> "The things that are being proposed to [the country team] are not what they're used to. So, in the FPP, for example, you are able to create a situation analysis, create a ToC, and then create a work plan, and then create a budget. Now, they may sound like it's normal, but they do theory of changes on their own. They do work plans, they do budgets, but the templates with each one that we want them to use and the framework with which you want to see these things in the Gavi format, is not a normal format that they use. So, it takes them a while to understand this template, these tools, and to understand your framework."
> Operational respondent, interview

Overall, the FPP process facilitated the intended shifts under Gavi 5.0, although there are some deficiencies linked to the gender shift. All aspects of the Identify Reach Monitor Measure Advocate (IRMMA) framework are covered, with the exception of 'Measure' which is covered to an extent but does not discuss how measurement activities will be integrated into national data systems. Regarding gender, the IRC review notes that while there is good coverage of gender coverage and barriers, there is no specific mention of barriers and activities for both adolescent/young mothers nor adolescent girls. All other shifts, including demand generation, innovation, inclusion of the ToC, etc. are well-covered in the FPP documentation.[55]

It is not completely clear why the majority of Gavi 5.0 shifts occurred apart from gender. The FPP process was deemed to be relatively thorough, and also received support from external consultants; these factors could explain why the IRMMA framework and other Gavi elements (i.e., the ToC) were robustly adhered to. Regarding gender, the FPP document notes significant gender barriers and inequities in Ethiopia, including the importance of education and low decision-making power for women seeking immunisation services for their children. The ToC details specific activities directed towards women, including those addressing programmes for women's empowerment and registration of pregnant women. It might be that the intention is to include adolescent pregnant women under these activities, but not enough detail was provided.

Respondents noted support from government and core partners as a key enabler to the FPP process. Alignment of the ZD agenda with wider policies and ownership at both federal and regional levels were felt to be key to engaging the various stakeholders and overall facilitation of the FPP process. The support from core partners, particularly resource, was also noted as an enabler to ensuring the FPP process was implemented as intended.

Respondents reported barriers during the FPP process was up to date data which could help identify ZD communities. Despite a robust identification process,[56] interviewees expressed concerns that data and monitoring systems were ineffective for first identifying ZD communities, as well as tracking progress over time.

Stakeholders pointed towards the challenging geography within Ethiopia, inadequate infrastructure within certain regions, and poor administrative practices; these were felt to be

> "There's a lot of trust that goes into these numbers, blind trust, that goes into these numbers. There is a lot of issues there, and we have had circumstances where there would be reports of 90% [or] something, but we would do a small insight gathering research, and we would find out even from just that number that we were targeting about 50% actually didn't get vaccinated, and they are of that target group."
> Operational respondent, interview

[55] Gavi. HSS 5.0 Key Shifts Tracker. Gavi: Internal documentation.
[56] IRC. Independent Review Committee (IRC) Country Report: Ethiopia. In-country review. 13–17 February 2023.

significant barriers effectively measure changes on target populations.

Objective 3: Contribution of Gavi 4.0 pro-equity and ZD grants

EQ5. How have Gavi grants initiated under Gavi 4.0 with continued implementation in 5.0/5.1 contributed to the delivery of the ZD agenda at the country level?

Summary of findings	• It is difficult to assess the contribution of Gavi 4.0 funding as the majority of HSS3 funds were directed towards the SDG PF, which is unearmarked. • Other funds disbursed under Gavi 4.0, including additional HSS3 funds, are equally difficult to assess due to a lack of available and up-to-date data in the Grant Performance Frameworks (GPF) 2016–2020, MSDs and previous Joint Appraisals (JAs). • Despite this, stakeholders reported that Gavi 4.0 activities helped to lay the groundwork for Gavi 5.0 activities, including building up cold-chain capacity, increasing resources, and keeping ZD on the agenda.			
Strength of the evidence	**1**	**2**	**3**	**4**
Rationale for this judgement	There is limited evidence to assess the contribution of Gavi 4.0 grants; quantitative data is generally lacking, and the available evidence is mainly qualitative interviews, which are less reliable.			

There is a considerable lack of data linked to Gavi 4.0 activities channelled into the SDG PF, limiting the evaluation teams' ability to meaningfully assess the contribution of Gavi 4.0 activities to the ZD agenda in Ethiopia. While the HSS3 ToC notes 'intermediate results' and 'related intermediate results indicators' for planned activities, these could not be triangulated with data made available to the evaluation team. The documents reviewed and associated limitations are noted below (mapped in Annex):

- **Grant Performance Framework (GPF) 2016–2020:** Data is missing for nearly all the indicators mapped to Gavi 4.0 activities; where data does exist, it is often only included for one-time point.

- **MSD 2020:** There is no reporting on activities linked to the initial HSS3 funds approved in 2015 (i.e. USD 80 million disbursed to the SDG PF). There is reporting on additional HSS3 funds, including USD 15 million for increased HSS ceiling, USD 5 million for PIRI funds, and USD 23.5 million for flexibility for additional funds. However, reporting on these funds is limited to disbursement in 2020, and data beyond this, including whether the activities took place and outcomes are achieved, is not reported on.

- **Joint Appraisal (JA) 2019:** Similarly, there is no reporting on activities linked to the initial HSS3 funds approved in 2015. Instead, there is reporting on progress towards immunisation outcomes.

Where reporting on indicators does take place, these are included in reference to 'immunisation outcomes', that is, longer-term coverage rates for specific vaccines. The exact reason for this is not detailed; however, it is likely that because the HSS3 initial funds were disbursed into the SDG PF, this limits the ability to accurately report on activity-linked indicators. Indeed, Gavi documentation reports *that*

"it is not possible to attribute within a pooled fund" and then goes on to detail the overall contributions the SDG PF to the health system more generally.[57]

Despite limitations in data, interviewees reported that Gavi 4.0 activities contributed to laying the groundwork for Gavi 5.0 activities. This included, strengthening the health system, particularly cold chains; increasing resources, including health workers and vaccine supplies; and keeping the ZD agenda as a key government priority. It is noted that without sufficient data or reporting, it is difficult to triangulate these findings.

> "So doing [Gavi 4.0 activities], the Gavi support was critical…. Gavi been covering the main vaccine supplies… Gavi was indispensable for our team… The cold chain support of Gavi was immense. It is very difficult to measure and explain in words, how the Gavi support is indispensable… Gavi's support was critical for Ethiopia's immunisation programme on the whole."
> Operational respondent, interview

[57] Gavi. FPP pre-screening, November 2022. *Internal Gavi documentation.*

Table 2.2: Mapping ZD related outputs to pro-equity interventions implemented under Gavi 4.0 with continued implementation into Gavi 5.0/5.1

ZD related outputs	Indicators	Pro-equity interventions programmed/ implemented[58]	Plausible contribution of Gavi (insufficient evidence, partial, full)
ZD children and missed communities are identified and targeted	DTP drop-out in targeted areas[59] DTP1 coverage in targeted areas[60] DTP drop-out[61] Geographic equity (DTP3 coverage)[62] No. of ZD children[63] Percentage of districts or equivalent administrative area with Penta3 coverage greater than 80%: +2% change from 2016–2020 (49% – 51%) Difference in Penta3 coverage between the highest and lowest wealth quintiles: 2018 34%; no data for other years Difference in Penta3 coverage between the highest and lowest wealth quintiles: 2018 34%, no data for other years Penta3 coverage difference between the children of educated and uneducated mothers/care-takers: 2018 22%, no data for other years	**Major activity one: Improve Child Health Service Delivery (HSS3 2015)[65]** • Improve community involvement through strengthening the HDAs • Improve immunisation coverage in low performing and hard-to-reach areas in the country through CSOs and other non-state actors' involvement • Strengthen the health extension programme through preservice training, integrated refresher training, upgrading training	The Gavi 2019 JA document does not report on specifics of this activity, and only references achievement towards endline immunisation outcomes, referencing eJRF data.[66] *"According to the 2018, Gavi Grant Performance framework, the agreed country targets for Penta 3, PCV3 and Rota 2 were: 98%, 96% and 95%, respectively. The country achieved over 90% which is closer to the targets set for all these antigens. The drop-out rate for all vaccines is close to 5% and shows improving trend."* The Gavi 2020 MSD document does not report on this activity, i.e. HSS3 activities disbursed into the SDG PF (USD 80 million).[67] As part of the Gavi 5.0/5.1 evaluation, interviewees noted that the Gavi 4.0 activities

[58] Activities were mapped from "Gavi. Health System Strengthening (HSS) Cash Support. Sep 08/Oct 12, 2015." Retrieved 27/09/23: https://www.gavi.org/sites/default/files/document/proposal-for-hss-support--ethiopia%282%29doc.doc
[59] No data in GPF 2016-20.
[60] No data in GPF 2016-20.
[61] No data in GPF 2016-20.
[62] No data in GPF 2016-20.
[63] No data in GPF 2016-20.
[65] Gavi. Health System Strengthening (HSS) Cash Support. *September 08/October 12, 2015. Retrieved 27/09/23: https://www.gavi.org/sites/default/files/document/proposal-for-hss-support--ethiopia%282%29doc.doc*
[66] Gavi. Joint Appraisal Ethiopia 2019. Retrieved 29/09/2023: https://www.gavi.org/sites/default/files/document/2020/Ethiopia%20Joint%20Appraisal%202019.pdf
[67] Gavi. Multi-stakeholder dialogue: Immunisation planning in light of COVID-19. *Gavi internal document.*

ZD related outputs	Indicators	Pro-equity interventions programmed/ implemented[58]	Plausible contribution of Gavi (insufficient evidence, partial, full)
	Difference in Penta3 coverage between children of urban and rural residences: 2018 16%, no data for other years Percent of districts with updated microplans that include activities to raise immunisation coverage[64]	• Improving the infrastructure of the health post	directed towards improving the capacity and skillset of the healthcare workforce contributed to laying the groundwork for the ZD agenda.
Supply chains are able to reliably deliver the full set of vaccines to missed communities	Closed vial wastage (DTPcv)[68] Stock availability at health facility levels[69] Effective vaccine management score (composite score): 2019 70%, no data for other years CCE expansion in existing equipped sites[70] CCE extension in unequipped existing and/or new sites[71]	**Major activity two: Strengthening the capacity of the national supply chain and vaccine regulatory system (HSS3 2015)[72]** • Strengthening cold-chain and supply chain system • Strengthening and upgrading the network designing • Strengthening of strategic vaccine and related product registration including Clinical Trial monitoring • Strengthening of vaccine Quality Control	The Gavi 2019 JA document does not report on specifics of this activity, and only references achievement towards endline immunisation outcomes, referencing JRF data.[73] *"According to the 2018, Gavi Grant Performance framework, the agreed country targets for Penta 3, PCV3 and Rota 2 were: 98%, 96% and 95%, respectively. The country achieved over 90% which is closer to the targets set for all these antigens. The drop-out rate for all vaccines is close to 5% and shows improving trend."* The Gavi 2020 MSD document does not report on this activity, i.e. HSS3 activities disbursed into the SDG PF (USD 80 million).[74]

[64] No data in GPF 2016-20.
[68] No data in GPF 2016-20.
[69] No data in GPF 2016-20.
[70] No data in GPF 2016-20.
[71] No data in GPF 2016-20.
[72] Gavi. Health System Strengthening (HSS) Cash Support. *September 08/October 12, 2015. Gavi internal document.*
[73] Gavi. Joint Appraisal Ethiopia 2019. Retrieved 29/09/2023: https://www.gavi.org/sites/default/files/document/2020/Ethiopia%20Joint%20Appraisal%202019.pdf
[74] Gavi. Multi-stakeholder dialogue: Immunisation planning in light of COVID-19. *Gavi internal document.*

ZD related outputs	Indicators	Pro-equity interventions programmed/ implemented[58]	Plausible contribution of Gavi (insufficient evidence, partial, full)
		• Establishing and Strengthening of Adverse Event Following Immunisation Monitoring System • Strengthening of inspection of vaccine supply and cold-chain management and vaccination	Interviewees, as part of the Gavi 5.0/5.1 evaluation, noted that the Gavi 4.0 activities directed towards cold chain contributed to laying the groundwork for the ZD agenda. *"The cold chain support of Gavi was immense. So, it is very difficult to measure and explain in words, how the Gavi support is indispensable. So this is a Gavi contribution for immunisation, for saving more children, is beyond the world's imagination. So we're really, it was impactful and it was so, so helpful, so Gavi's support was critical for [the] immunisation programme on the whole."* *Operational respondent.*
Programmes and approaches are continuously monitored and generate learning for course correction	EPI management capacity[75]	**Major activity three: Strengthening the monitoring and evaluation system (HSS 2015)[76]** • Procurement of tablet computers for 15,000 health extension workers • Development of integrated tablet and mobile-based application software	The Gavi 2019 JA document does not report on specifics of this activity, and only references achievement towards endline immunisation outcomes, referencing JRF data.[77] *"According to the 2018, Gavi Grant Performance framework, the agreed country targets for Penta 3, PCV3 and Rota 2 were: 98%, 96% and 95%, respectively. The country achieved over 90% which is closer to the targets set for all these antigens. The drop-out*

[75] No data in GPF 2016-20
[76] Gavi. Health System Strengthening (HSS) Cash Support. *September 08/October 12, 2015. Gavi internal document.*
[77] Gavi. Joint Appraisal Ethiopia 2019. Retrieved 29/09/2023: https://www.gavi.org/sites/default/files/document/2020/Ethiopia%20Joint%20Appraisal%202019.pdf

ZD related outputs	Indicators	Pro-equity interventions programmed/ implemented[58]	Plausible contribution of Gavi (insufficient evidence, partial, full)
		• Customising of application software's • In service training of 11,740 managers and health workers and health extension workers on information use and data quality • Training of 500 Health Information Technicians to strengthen HMIS at all levels	*rate for all vaccines is close to 5% and shows improving trend."* The Gavi 2020 MSD document does not report on this activity, i.e. HSS3 activities disbursed into the SDG PF (USD 80 million).[78]

[78] Gavi. Multi-stakeholder dialogue: Immunisation planning in light of COVID-19. *Gavi internal document.*

3 Annex

Table 3.1: Desk review documents

Source	Document title	Year
Audit Services Corporation	Sustainable Development Goals Performance Fund: Independent auditor's report and financial statements, 7 July 2019	2019
Ethiopia MoH	Health System Strengthening proposal 2015	2015
Ethiopia MoH	Health Sector Transformation Plan II (2020/21–2024/25)	2020
Ethiopia MoH	Ethiopia National EPI: Comprehensive Multi-Year Plan (2021–2025)	2021
Ethiopia MoH	Ethiopia's Immunisation Full Portfolio Planning (FPP) documentation, December 2022	2022
Ethiopia MoH	Minutes of E-ICC Meeting on 9 November 2022	2022
Ethiopia MoH	FPP Situational Analysis, 2 January 2023	2023
Ethiopia MoH	Gavi Ethiopia FPP Budget	2023
Ethiopia MoH	Supporting narrative for the FPP ToC	2023
Gavi	Independent Review Committee (IRC) Country Report. Gavi Secretariat, Geneva, 9–20 November 2015 Country: Ethiopia	2015
Gavi	Independent Review Committee (IRC) Country Report: Remote review Ethiopia [October 2019]	2019
Gavi	Joint Appraisal 2019	2019
Gavi	Grant Performance Framework	2020
Gavi	Multi-stakeholder dialogue 2020	2020
Gavi	Targeted Country Assistance Plans 2018 – 2021	2021
Gavi	HSS 5.0 Key shifts tracker	2023
Gavi	Independent Review Committee (IRC) Country Report: Ethiopia. In-country review, 13–17 February 2023	2023
IOD PARC	Gavi PEF TCA Country Assessments: Meta Review (Draft)	n.d.
Project Hope	Reaching ZD and under-immunised children in remote and underserved settings of Ethiopia: Evaluation	2023

Table 3.2: List of academic sources

Source	Document title	Year
Clarke-Deelder et al.	Impact of campaign-style delivery of routine vaccines: A quasi-experimental evaluation using routine health services data in India	2021
Columbia Mailman School of Public Health	Ethiopia I Summary	n.d
Summan, A., Nandi, A., Deo, S. and Laxminarayan, R.	Improving vaccination coverage and timeliness through PIRI: evidence from Mission Indradhanush	2021
Tougher, S., Mandalia, N., Kou Griffiths, U.	Recovery of routine immunisation: mapping external financing opportunities for reaching ZD children	2023
Yibeltal et al.	Trends, projection and inequalities in full immunisation coverage in Ethiopia: in the period 2000–2019	2022

Table 3.3: List of stakeholders

ID	Position	Organisation	Categorisation	Remote vs in-person

1	Immunization Service Desk Head	Federal Ministry of Health	Strategic	Remote
2	Acting EPI Coordinator	WHO	Strategic	Remote
3	Chief of Health	UNICEF	Strategic	Remote
4	Health Proramme Officer	UNICEF	Operational	Remote
5	Country Director	CHAI	Strategic	Remote
6	Senior Program Manager - Vaccine Program	CHAI	Operational	Remote
7	Country Director	PATH	Strategic	Remote
8	Senior Team Leader	PATH	Operational	Remote
9	Immunization Project Director	JSI	Strategic	Remote
10	Senior Health and Nutrition Coordinator	International Rescue Committee Ethiopia	Strategic	Remote
11	CCRDA/CGPP Program Advisor	CCRDA	Operational	Remote
12	Program Lead	Girl Effect	Operational	Remote
13	Project Manager	Acasus	Operational	Remote
14	Regional EPI coordinator	Regional Ministry of health	Frontline	Remote
15	Regional EPI coordinator	Regional Ministry of health	Frontline	Remote

Table 3.4: Mapping Gavi 4.0 grants using available documentation

Document	HSS3 through SDG PF	Additional / reprogrammed HSS3 funds
Health System Strengthening Proposal 2015		N/A
Ethiopia: Request for Additional HSS funds 2018		Application for additional HSS3 funds (23.5 million) from 2019–2020
IRC Country report June 2019 **IRC Country report Oct 2019**		Additional HSS3 funds (USD 23.5 million) approved from 2019–2020 following a re-review process
Multi-Stakeholder Dialogue (MSD) 2020	USD 70 million disbursed	Reference to: Additional HSS3 funds: USD 23.5 million approved / USD 23.5 million disbursed / USD 0 expended Increased HSS3 ceiling: USD 15 million / USD 13 million disbursed / USD 2 million expended PIRI HSS3 funds: USD 5 million / USD 1.6 million disbursed/ USD 1.6 million expended USD 5 million reallocated to COVID-19 activities from the HSS3 funds directed towards the SDG PF
IRC Country report March 2023	States *'the total Gavi HSS3 contribution to the SDG PF for the period 2017–2021*	States *'Ethiopia also received earmarked HSS funding as follows: a) $ 15 million of which $13.7M had been spent by December 2022; and b) $ 23M of which $ 5.4M had been spent by December 2022 and $ 18M mainly committed to procurement of cold-chain vehicles and equipment, procurement of tablets and other activities.'*

	was USD 75 million'.	While a) likely refers to the Increased HSS3 ceiling and b) refers to the Additional HSS3 funds, and c) refers to CCEOP funding, there is no reference to the PIRI HSS3 funds mentioned in the MSD nor the reallocated COVID-19 funds

Our standards and accreditations

Ipsos' standards and accreditations provide our clients with the peace of mind that they can always depend on us to deliver reliable, sustainable findings. Our focus on quality and continuous improvement means we have embedded a "right first time" approach throughout our organisation.

ISO 20252

This is the international market research specific standard that supersedes BS 7911/MRQSA and incorporates IQCS (Interviewer Quality Control Scheme). It covers the five stages of a Market Research project. Ipsos was the first company in the world to gain this accreditation.

Market Research Society (MRS) Company Partnership

By being an MRS Company Partner, Ipsos endorses and supports the core MRS brand values of professionalism, research excellence and business effectiveness, and commits to comply with the MRS Code of Conduct throughout the organisation. We were the first company to sign up to the requirements and self-regulation of the MRS Code. More than 350 companies have followed our lead.

ISO 9001

This is the international general company standard with a focus on continual improvement through quality management systems. In 1994, we became one of the early adopters of the ISO 9001 business standard.

ISO 27001

This is the international standard for information security, designed to ensure the selection of adequate and proportionate security controls. Ipsos was the first research company in the UK to be awarded this in August 2008.

The UK General Data Protection Regulation (GDPR) and the UK Data Protection Act (DPA) 2018

Ipsos is required to comply with the UK GDPR and the UK DPA. It covers the processing of personal data and the protection of privacy.

HMG Cyber Essentials

This is a government-backed scheme and a key deliverable of the UK's National Cyber Security Programme. Ipsos was assessment-validated for Cyber Essentials certification in 2016. Cyber Essentials defines a set of controls which, when properly implemented, provide organisations with basic protection from the most prevalent forms of threat coming from the internet.

Fair Data

Ipsos is signed up as a "Fair Data" company, agreeing to adhere to 10 core principles. The principles support and complement other standards such as ISOs, and the requirements of Data Protection legislation.

For more information

3 Thomas More Square
London
E1W 1YW

t: +44 (0)20 3059 5000

www.ipsos.com/en-uk
http://twitter.com/IpsosUK

About Ipsos Public Affairs

Ipsos Public Affairs works closely with national governments, local public services and the not-for-profit sector. Its c.200 research staff focus on public service and policy issues. Each has expertise in a particular part of the public sector, ensuring we have a detailed understanding of specific sectors and policy challenges. Combined with our methods and communications expertise, this helps ensure that our research makes a difference for decision makers and communities.