Republic of Ghana

Ghana Health Services (GHS)

Strengthening Community-Based Health Services Focusing on the Life-course Approach in the Upper West, Upper East, and Northern Regions

Project Completion Report

October 2023

Japan International Cooperation Agency (JICA)

IC Net Limited

HM
JR
23-037

Republic of Ghana

Ghana Health Services (GHS)

Strengthening Community-Based Health Services Focusing on the Life-course Approach in the Upper West, Upper East, and Northern Regions

Project Completion Report

October 2023

Japan International Cooperation Agency (JICA)

IC Net Limited

Abbreviations

ALMA	African Leaders Malaria Alliance
ANC	Antenatal Care
BMI	Body Mass Index
CETS	Community Emergency Transport System
CHAP	Community Health Action Plan
CHMC	Community Health Management Committee
CHN	Community Health Nurse
CHO	Community Health Officer
CHPS	Community-Based Health Planning and Services
CHPS-DB	CHPS Database
CHV	Community Health Volunteer
COVID-19	Coronavirus Disease 2019
CPs	Counterparts
DA	District Assembly
DAC	Development Assistance Committee
DCHOO	District Community Health Officer Orientation
DDHS	District Director of Health Services
DHA	District Health Administration
DHMT	District Health Management Team
DHIMS 2	District Health Information Management System 2
DHQPR	District Health Quarterly Performance Review
DPCU	District Planning Coordination Unit
FHD	Family Health Division
FSV	Facilitative Supervision
GHS	Ghana Health Service
GHS HQ	Ghana Health Service Headquarter
GoG	Government of the Republic of Ghana
HCT	Harmonised CHO Training
HFFG	Hope for Future Generations
HIAP	Health Integrated Annual Action Plan
HIO	Health Information Officer
HNQIS	Health Network Quality Information System
HPO	Health Promotion Officer
HSS-TWG	Health System Strengthening-Technical Working Group
HTS	Health Training School
ICD	Institutional Care Division
IEC	Information Education and Communication
IGF	Internally Generated Funds
LHIM	Lightwave Health Information Management System
ISS	Integrated Supportive Supervision
JCC	Joint Coordination Committee

JICA	Japan International Cooperation Agency
LCA	Life-course Approach
OECD	Organization for Economic Co-operation and Development
MCHRB	Maternal and Child Health Record Book
MTC	Midwifery Training College
MOH	Ministry of Health
MRR	Monthly Referral Returns
NR	Northern Region
NER	North East Region
N&MC	Nursing and Midwifery Council of Ghana
NAC	Nurse Assistant Clinical
NAP	Nurse Assistant Preventive
NCDs	Non-communicable Diseases
NHIS	National Health Insurance Scheme
NOPs	Networks of Practice
NMI	Non-monetary Incentive
PDM	Project Design Matrix
PHC	Primary Health Care
PM	Person-Month
PNC	Post Natal Care
PPMED	Policy Planning, Monitoring & Evaluation Division
RCC	Regional Coordinating Council
R/D	Record of Discussion
RHA	Regional Health Administration
RHMT	Regional Health Management Team
RPCU	Regional Planning Coordination Unit
SR	Savannah Region
SBCC	Social Behaviour Change Communication
SDHT	Sub-District Health Team
SS	Supportive Supervision
TRC	Technical Review Committee
TWG	Technical Working Group
UER	Upper East Region
UWR	Upper West Region
UHC	Universal Health Coverage
UNDP	United Nations Development Programme
USAID	United States Agency for International Development
WHO	World Health Organization (Organisation)

Table of Contents

List of Tables, Figures and Boxes

List of tables

List of Figures

List of Boxes

List of Appendices

*Baseline survey report was submitted in August 2018 as a part of Annex of Progress Report and Endline survey report was submitted in May 2023 separately.

Chapter 1: Framework of the Project

1.1 Background

1.1.1 Health Policy in Ghana

The Government of the Republic of Ghana (hereafter referred to as GoG) has identified the health sector as a critical sector for human development, productivity and employment creation which in turn makes it one of the seven priorities identified in the National Mid-Term Development Policy Framework (NMTDPF, 2014–2017). In response, six strategies promoted community health services based on primary healthcare (PHC), including improving geographical access, sustainable health financing, strengthening health system management, and strengthening measures against non-communicable diseases in the Health Sector Mid-Term Development Plan (HSMTDP, 2014–2017) with the goal of achieving Universal Health Coverage (UHC). A key strategy for realising this goal was identified as Community-based Health Planning and Services (CHPS).

The CHPS Policy was adopted in 1999 as a national policy to increase community participation and ownership in PHC as well as to promote community health services to achieve UHC. In 2016, a new CHPS Policy was developed and translated into the CHPS implementation guidelines. Activities such as referrals and Supportive Supervision (SS) are currently undertaken to expand the scope, standardise, and improve the quality of services in the CHPS zone based on the new policy.

Box 1-1: Basic Information on CHPS Policy[1]

1. Definition of CHPS

'CHPS is a national strategy to deliver essential community-based health services involving planning and service delivery with the communities. Its primary focus is communities in deprived sub-districts and general bringing health services close to the community.'

2. Definition of CHPS Zone

'A CHPS Zone refers to a demarcated geographical area of up to 5,000 persons or 750 households in densely populated areas and may be co-terminus with electoral areas where feasible.' Of these, the conditions for a functioning CHPS zone are as follows.

3. Condition of Functional CHPS Zone[2]

(1) CHO (a qualified Community Health Nurse (CHN) who has been trained using an approved Community Health Officer (CHO) training approach) is deployed.

(2) Health and medical services are provided at the facility (Monthly report is submitted).

[1] These descriptions are based on National Community-health Planning and Services (CHPS) Policy (March 2016) and National CHPS Implementation Guidelines (September 2016).

[2] These conditions determined by the Policy, Planning, Monitoring and Evaluation (PPMED) of the Ghana Health Service headquarters (GHS HQ) based on the 15 steps of CHPS implementation described in the CHPS National Implementation Guidelines, September 2016.

(3) There are active Community Health Management Committee (CHMC) [3]and Community Health Volunteers (CHVs).[4]

(4) Minimum basic medical equipment is available.

4. Services provided by CHPS

The CHPS zone needs to provide 'CHPS basic package of services' (Minimum package)[5] to communities. The National Implementation Guidelines also show the range of services and expected service providers in the CHPS zone. The table below shows the basic package of services which CHOs, CHVs, and CHMC are expected to provide.

Services provided by CHO, CHVs and CHMC

1. Provided by CHO			
1.1	**Community linkage and outreach services**	**A3.**	**Other clinical services**
1	Health promotion and education	16	Infection prevention
2	Disease surveillance	17	Communicable diseases (HIV, Malaria, TB)
3	Home visits	18	Non-communicable and chronic diseases (hypertension, diabetes)
4	School health	19	Neglected tropical diseases
5	Outreach activities	20	Adolescent health
6	Managing CHVs	21	Mental health
7	Working with the CHMC	22	Minor aliments
1.2	**Basic clinical services**	23	First aid and home emergencies
A1.	**Child health**	24	Caring for the Aged
8	Immunisation	**1.3**	**Resource management**
9	Breastfeeding (BF), Growth monitoring, and nutrition	25	Planning
10	Acute care of infants and children	26	Logistics management
A2.	**Reproductive health**	27	Financial management
11	Family planning	28	National Health Insurance Agency (HHIA)
12	HIV/AIDS and sexuality transmitted infections (SITIs)	29	Data collection, reporting, analysis, and use
13	ANC		
14	Safe emergency delivery and newborn resuscitation		
15	Postnatal care (PNC) and essential newborn acre		
2. Provided by CHV		**3. Provided by CHMC**	
30	Disease prevention and environment sanitation	35	Governance, membership, and operation
31	Home visiting	36	Selection and supervision of CHVs
32	Home management of minor aliments (integrated community case management)	37	Welfare of CHO (include Security)
33	Community outreach	38	Facility maintenance
		39	Resources mobilization and management

1.1.2 Challenges in Ghana's Health Sector

The GoG has focused on maternal and child health as well as infectious disease control in Ghana's health sector but has failed to achieve the Millennium Development Goals (MDGs)[6] despite some success.

[3] Definition of active CHMC: The CHMC that held a CHMC meeting at least once in the last three months.
[4] Definition of active CHV: The CHV that reports their activities to CHO monthly.
[5] In the 'CHPS Policy March 2016' and the 'CHPS National Implementation Guidelines September 2016', the terms 'minimal package', 'basic package', and 'service package' are intermingled to describe the 'CHPS basic package of services'. The terms used in PDM for this Project is 'minimum package of services'. Since the term 'Minimum Package' is often used among Project stakeholders, this report will basically use 'Minimum Package' except when the PDM wording is used.
[6] The UN set out eight goals known as the MDGs to be achieved globally by 2015. Three out of the eight goals are related to health: reduction of child mortality, improvement of maternal health, and combat against HIV/AIDS, malaria, and other diseases.

Meanwhile, Ghana, now a low- and middle-income country, is undergoing a period of social transition with an aging population due to demographic shifts. While the threat of infectious diseases, such as cholera and other outbreaks, remain a traditional epidemiological challenge, noncommunicable diseases (NCDs) are emerging as a new challenge. Additionally, because of national budget constraints, human resources for healthcare are inadequate. There are large regional disparities in health services, particularly in the northern part of the country, where the benefits of development have not been fully reaped. Consequently, there is an urgent need to improve the deployment of the healthcare workforce and geographical access to health services.

To respond to these societal changes and regional disparities, it is necessary to move beyond traditional issues to address new challenges, such as NCDs and aging populations, and broaden the scope of health services to include a life-course approach that addresses health issues for all age groups and at all stages of life than remain confined to limited target groups and specific health concerns, such as maternity, child health, and infectious disease control.[7] This is important because a focus on prevention and health promotion can help households and governments reduce their spending on healthcare. Additionally, as the GoG moves towards decentralisation, it is essential to deepen the involvement of communities and local governments in the delivery of services to make them more resilient.

1.1.3 Request for Technical Cooperation Projects on CHPS Policy and Health Issues

The Japan International Cooperation Agency (JICA) has helped develop a standardised CHPS mechanism in the Upper West Region (UWR) of Northern Ghana with the 'Project for Scaling up of CHPS Implementation in the Upper West Region[8] from 2006 to 2011 and the ‘Project for Improvement of Maternal and Neonatal Health Services Utilizing CHPS System in the Upper West Region’[9] from 2011 to 2016. The Project from 2006 to 2011 established standardised CHPS mechanisms, including a training system for CHOs, a referral system, the establishment and strengthening of a Facilitative Supervision system, and the promotion of community participation activities to promote CHPS implementation. Moreover, the Project from 2011-2016 strengthened MCH services using an improved CHPS implementation system. In addition, JICA helped build CHPS compounds and supplied medical and transportation equipment to the UWR.

Based on these developments, and aiming to further promote the achievement of UHC, in 2016, the GoG requested Japan to implement the technical cooperation project 'Strengthening Community-Based Health Services Focusing on the Life- Course Approach in the Upper West, Upper East and Northern Regions'

[7] The Project captured the term of life-course approach (LCA) as the concept of investing in people's health through health promotion and disease prevention, with all age groups and all stages of life as important, bearing in mind that individual and community health status is viewed in the context of the flow of life and is affected by various risk factors.(Sources: Glossary of Life-course Terms, WHO, 2015 / A life-Course Approach to Health, WHO, 2012, etc.)
[8] Project for Scaling up of CHPS Implementation in the Upper West Region
[9] Project for Improvement of Maternal and Neonatal Health Services Utilizing the CHPS System in the Upper West Region.

(hereinafter referred to as the 'Project'). Note that the three targeted regions were subsequently reorganised into five regions.

1.2 Project Objectives

The Project aimed to strengthen community health services by incorporating a Life-course Approach (LCA), by developing the planning and implementation capacity of the CHPS, strengthening community activities and governance, and thereby improving access to and use of PHC through the CHPS.

The specific objective was to introduce LCA services at the CHPS level and present a model for overcoming the challenges in solving PHC problems. In the Upper East Region (UER), Northern Region (NR), Northeast Region (NER), and Savannah Region (SR), the outputs aim to achieve policy objectives through effective system dissemination and improved CHPS implementation, drawing on the experience of JICA's 10 years of work in the UWR. These activities contribute to building resilient health systems that can respond to changing geographical conditions and disease patterns cost-effectively.

1.3 Project Structure

The structure of the Project in the Project Design Matrix (PDM) is shown in Table 1-1 below. (Ref: Appendix 1: PDM Version 3)

Table 1-1: Project Overview

Overall Goal
Universal health coverage is promoted by improving access and utilization of primary health care through Community-based Health Planning and Services (CHPS)
Project Purpose
Community health services focusing on the life-course approach are strengthened
Outputs
Output 0: The project is monitored and evaluated periodically, and good practices and lessons learned are shared with other regions and GHS HQ (Ghana Health Service Headquarter) for scaling-up.
Output 1: The capacity of CHOs and health management teams (Sub-District Health Teams (SDHT), District Health Management Teams (DHMT) and Regional Health Management Team (RHMT) to provide PHC services such as health education, community participation and referrals to the local community to plan and implement CHPS policy to national standards is strengthened.
Output 2: Community activities of CHPS are strengthened
Output 3: Governance of CHPS by local government and stakeholders is strengthened
Output 4: Life-course approach is addressed in the minimum package of CHPS

1.3.1 Overall Goal and Project Purpose

The Overall Goal of the Project was to contribute to the achievement of UHC through improved access to and use of PHC through CHPS. Therefore, the Project aimed to strengthen the CHPS functionality based on LCA services.

1.3.2 Project Outputs

Four outputs were set to achieve the Project Purpose.

Output 1 was related to 'Geographical expansion of functional CHPS and strengthening of implementation' in five target regions. While extending the implementation of the result of two earlier technical cooperation projects such as the CHPS Database (CHPS-DB) and CHO training, referral, and supervision systems and approaches, from the UWR to the other four northern regions, the national standardisation of systems and activities related to CHPS was promoted at the national level.

Output 2, 'Strengthening community participation", aimed to strengthen the capacity of CHMCs and CHVs, the core of community activities–to increase community health activities, including LCA. Strengthening community participation has been identified as an important but challenging issue in the CHPS initiatives. Consequently, a system to strengthen community participation was developed. The direct intervention target area for this Output was the UWR. For the UER, NR, NER, and SR, the Project conducted indirect interventions through measures such as CHO training and District CHO orientation, aimed at strengthening CHO capacity.

Output 3 focused on 'Strengthening of administrative functions'. Specifically, the functions of the District Assembly (DA) were strengthened to ensure support for CHPS and health-related activities. In addition, collaboration between the Regional Coordinating Council (RCC), the DA, and the health sector was strengthened. The Project facilitated RCC and DA to support services in the CHPS in terms of technical and financial aspects, as well as human resources. Particularly, the establishment of mechanisms to make support sustainable has been promoted. As in Output 1, the results of previous technical cooperation projects were extended to the five target regions.

Output 4 was related to 'Piloting services for LCA in Ghana', which was to introduce LCA[10] covering all age groups into the CHPS package to strengthen its services to prevent disease and promote healthy living. A new training module was developed and piloted in UWR, which already has a strong foundation for CHPS and community activities. UWR, where there is already a foundation of CHPS activities and community activities, the Project developed pilot modules for new training in consultation with the central government. The Project aimed to utilize Japanese technology and experiences to work towards the improvement of Ghana's community health services in the future. As for Output 2, the direct target was the UWR, while indirect interventions were implemented for the UER, NR, NER, and SR through the strengthening of CHO capacity.

Additionally, Output 0 included overall decision-making and project management, including monitoring

[10] LCA at the CHPS level in Ghana was defined during the Project period. This definition is described in the Output 4 part of Chapter 2 Activities.

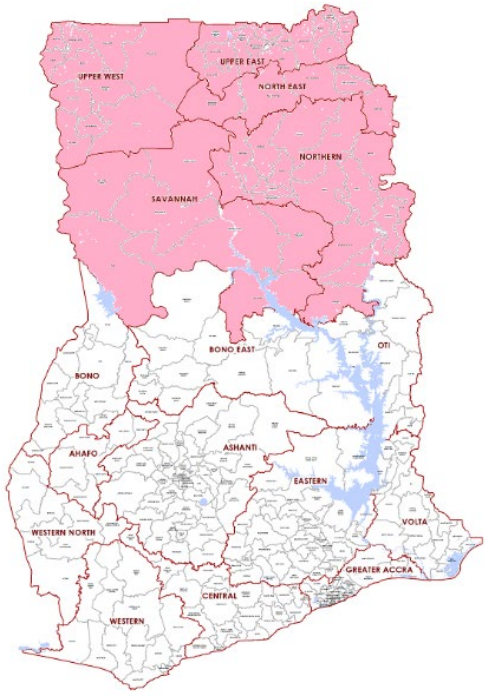
and tracking progress by GHS HQ. Others include sharing lessons learned and engaging in good practice.

1.3.3 Background on the Revision of the PDM

The PDM was revised thrice during the Project period. The main reasons for the revisions were changes in the names and number of Project target areas due to the reorganisation of areas and regions, new policies and programs introduced by the national government, the need to reconsider activities due to the Coronavirus Disease 2019 (COVID-19) pandemic and security reasons, along with the finalisation of indicators that could not be defined at the beginning, such as those related to LCA. The final version of the PDM was the third edition approved by the Joint Coordination Committee (JCC) in July 2021, and the Record of Discussion (R/D) changed in December of the same year.

1.4 Project Target Areas and Characteristics

The Project covers five regions in Northern Ghana. The total population is more than 5 million and covers about 40% of Ghana. Figure 1-1 shows an administrative map of Ghana and the locations of the Project target regions.



Source: Ghana Census Report 2021, Volume 3A, Population of Regions and Districts

Figure 1-1: Administrative map of Ghana

From its onset, the Project covered three regions: UWR, UER, and NR. In December 2018, the Government of Ghana reorganised the regions, and the NR was split into three regions: NR, NER, and SR, bringing the total number of regions covered by the Project to five. Activities in the newly created NER and SR as a

result of this regional reorganization[11] started in the first half of 2019. In the same year, there was also a division of districts, with the number of districts in UER and NR increasing from 13 to 15 and 26 to 29 respectively in 2018. The area, population, and number of districts covered are listed in Table 1-2.

Table 1-2: Overview of Project Target Regions

Region	UWR	UER	NR	NER	SR
Area size	18,476 km²	8,842 km²	25,449 km²	9.072 km²	35,862 km²
Population	920,430	1,328,551	2,359,468	672,784	762,939
No. of districts	11 districts	15 districts	16 districts	6 districts	7 districts

Source: DHIMS 2, 2022.

1.5 Counterparts (CPs)

Table 1-3 lists the main CPs.

Table 1-3: CPs of the Project

- Related ministry: Ministry of Health
- Implementing body: GHS
- Project director: Director General of GHS HQ
- Project manager: Regional Directors of GHS Regional Health Services in the five target regions
- Project coordinator: Director of Policy Planning and Monitoring Evaluation Division (PPMED) of GHS HQ
- At GHS HQ, the Family Health Division (FHD), Public Health Division (PHD), Institutional Care Division (ICD), Finance Division, Human Resources Division and Research and Development Division are also involved.

As shown in Figure 1-2, the GHS has three administrative levels (national, regional, and district) and five functional levels (subdistrict and CHPS). The national level is responsible for implementing health programs, managing human resources, and remunerating health workers deployed up to the CHPS level, whereas the regional level provides coordination, support, and supervision to districts. In these districts, health services are provided at the working level in a three-tier hierarchy, with the district level at the top, the subdistrict level at the second tier, and CHPS zones. The District Health Management Team (DHMT) is responsible for district health policy and decision-making, management, and operation of subdistricts and CHPS facilities under their jurisdiction, and coordination with the DA at the administrative level.

In implementing the Project, decision-making meetings were held at several levels for the GHS HQ and the five target regions to build consensus from the bottom to the top of the organisation. In addition to the JCC being the highest decision-making meeting, regional coordination meetings were held to share information with CPs. Regional management meetings were conducted to discuss activities in each region, and regional coordination meetings were held to coordinate strategy development and resource allocation among the five regions.

[11] Owing to restrictions in outsourcing the contract between JICA and the consultancy, it was decided not to change the name of the Project.

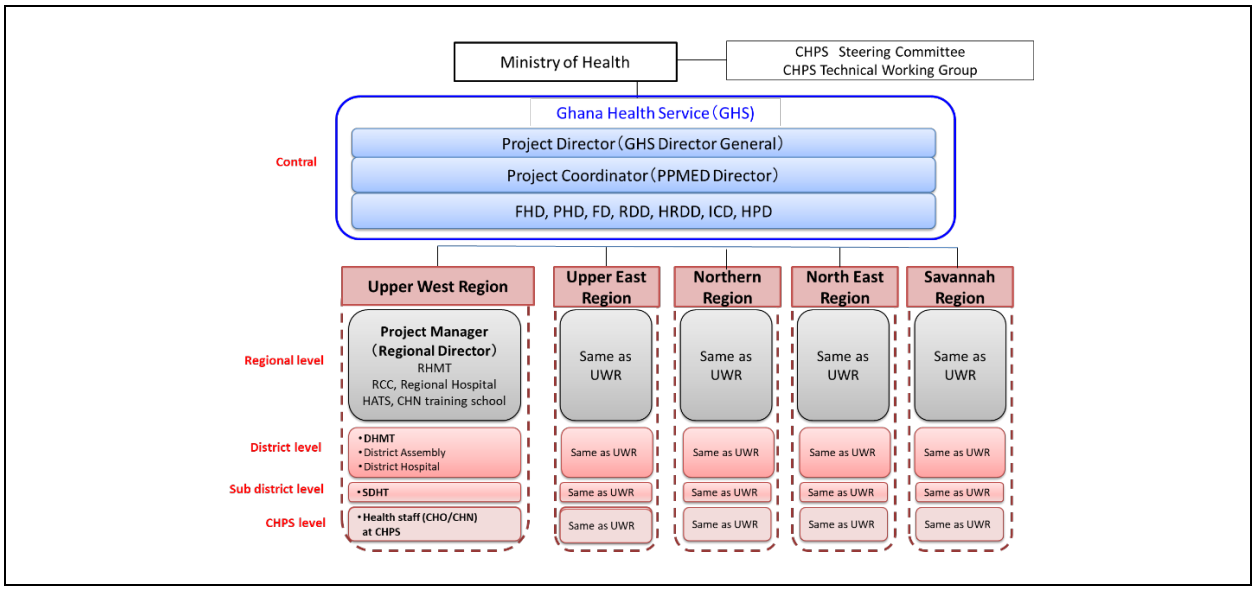


Figure 1-2: Functional Levels of Project CPs and Decision-Making Institutions

1.6 Stakeholders of the Project

In addition to the CPs mentioned above, the DA, the Nurse Assistant Preventive (NAP), and Nurse Assistant Clinical (NAC) tutors were important stakeholders on the Ghanaian side (Figure 1-2). The Project targeted these schools to train personnel for deployment at the CHPS level.

Project activities mainly targeted the RHMT, DHMT, subdistrict health Team (SDHT), CHPS, and CHPS beneficiary communities.

Figure 1-3 and Table 1-4 show the relationship between CPs and the stakeholders involved as well as the Project results.

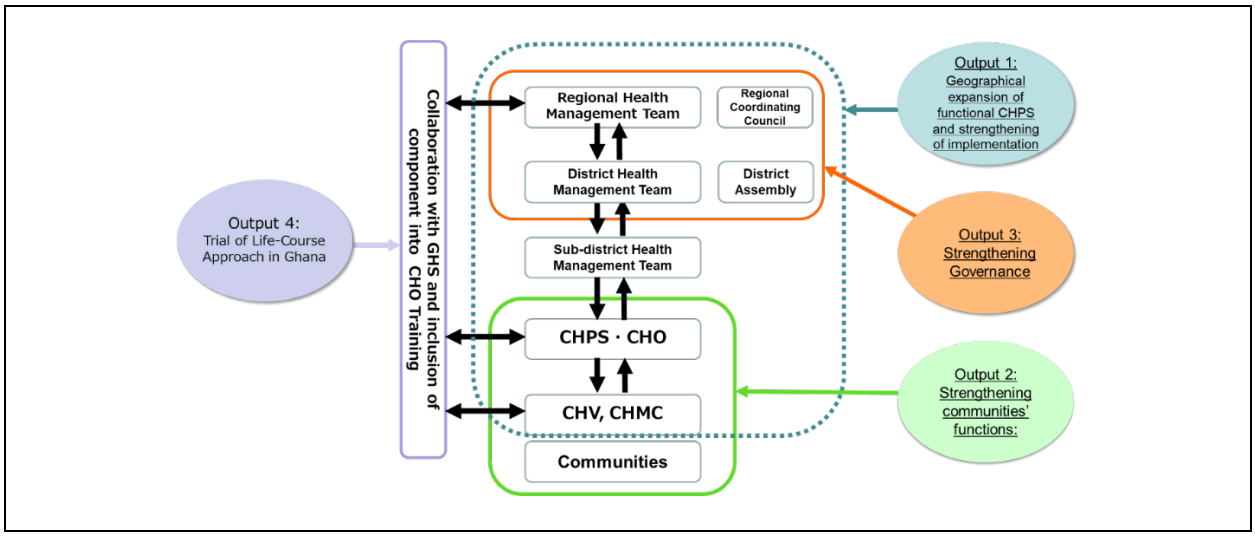


Figure 1-3: Project Outputs and Relationships with Related Stakeholders

Table 1-4: Overview of CPs and Related Stakeholders

Related Stakeholders	Overview
Reginal Health Management Team (RHMT)	It is the highest decision-making body for health matters, overseeing the DHMT, regional hospitals and district hospitals. It is the main counterpart of the Project.
District Health Management Team (DHMT)	Oversees the working level of health management in the district. Supervises SDHTs at sub-district level and oversees the training and deployment of CHO personnel.[12]
Sub-District Health Teams (SDHT)	Oversees the CHOs and acts as a liaison with the district level. Each district is divided into more than four sub-districts depending on its size. Clinical functions include health centres, with delivery as the main service.
Community Health Officer (CHO)	CHPS-trained health workers who are deployed to CHPS zones and work with communities to achieve the goal of providing basic PHC.
Community Health Volunteer (CHV)	Volunteers who are formally selected by the community to support the work of the CHOs on a pro bono basis; supervised by the CHMCs, with the CHOs providing technical guidance to the CHVs.
Community Health Management Committee (CHMC)	It is a committee of community residents that leads the planning and implementation of local community-based health activities. It is also responsible for the management and supervision of CHVs.
Community	There are usually between one and ten communities in a CHPS zone. Each community has a chief who organizes things through meetings (durbars) and other means.
District Assembly (DA)	It is responsible for district administration; the DA has decision-making power over the district budget. It also provides operational support to the health sector on request; the DA is responsible for building the infrastructure of the CHPS and providing the necessary equipment for the CHPS.
Regional Coordinating Council (RCC)	Responsible for regional administration and oversight of the DA, the RCC makes decisions on regional administrative and budgetary matters.
Training School	There are three types of training schools associated with the Project. NAP, which trains staff mainly for placement in CHPS; NAC, which trains clinical staff for hospitals and health centres; and Midwifery Training College (MTC), which trains midwives, and in some cases CHNs and CHOs go to midwifery training schools for career advancement.

Table 1-5 lists the health facilities available in the five target regions. With the exception of the tertiary health facility,[13] the Tamale Teaching Hospital in NR, the secondary health facilities, [14] the regional hospitals in UWR, UER, and NR, and the remaining facilities were primary health facilities.[15] Therefore, the number of hospitals above the level of secondary health facilities was limited in the five target regions, leaving primary health facilities to play an important role in prevention and treatment. Therefore, it is very important to ensure the quality of primary healthcare facilities, including the CHPS, and develop a referral system for secondary and tertiary healthcare facilities.

In general, the flow of referrals in Ghana starts from the CHPS to the health centre, the district/regional hospital, and the teaching hospital. Patients who cannot be handled at the CHPS facilities are first referred to their supervising health centre located in their district of jurisdiction. Patients requiring further

[12] CHPS Implementation Policy (GHS, 2005)
[13] Tertiary care facilities are regional core hospitals across regions and health care facilities that can provide comprehensive care and have inpatient facilities and educational functions.
[14]The secondary health care level is a regional level facility that covers a population of about 1.2 million and is a health care facility that can provide specialized services that district hospitals cannot.
[15] The primary health care level is a health care facility that provides PHC services at the community, CHPS, sub-district, and district levels.

examination and treatment at a health centre are then referred to a higher health facility. This flow prevents hospitals from congestion of the patients and ensures health service quality at health facilities. With this, patients can receive the appropriate health services they need in facilities based on the severity of their health condition. In Ghana, the health centre functions as a gatekeeper of health services. Strengthening the referral system is essential for efficient and effective use of limited health resources.

Table 1-5: Available Health Facilities in the Five Target Regions

Region	Total No. of Health Facilities	Regional/district/private hospitals	Polyclinic	Health centres	Clinics	Maternity homes	CHPS Zone with compound
UWR	419	10	5	77	16	5	306
UER	376	13	0	70	38	3	252
NR	356	36	2	63	24	7	216
NER	102	5	0	21	5	0	71
SR	159	8	4	26	7	3	111

Source: End-line Survey report (p.8)

1.7 Duration of the Project

At the time of the original implementation plan, the Project was envisaged for a project period of May 2017 to May 2022. However, at the time of the contract, it was decided to split the contract into two terms (July 2017 to July 2019 and November 2019 to July 2022) with a project period of five years from July 2017 to July 2022. On the other hand, owing to delays in activities caused by the COVID-19 pandemic, the Project was extended by one year to July 2023, with a revised R/D.

- First term: July 2017 to July 2019
- Second term: November 2019 to July 2023

1.8 Input results

1.8.1 Japanese input results

Table 1-6 presents Japanese input results and Project implementation costs are also summarized. See Appendix 4 for the results of experts dispatched and Appendix 7 for the results of equipment provided.

Table 1-6: Input results (Japanese side)

Input details	Track record
Japanese experts	➢ A total of 13 experts were deployed to 10 posts in the first term (60.67 person-months (PM) in total, including 3.65 PM for work in Japan). - Chief Advisor/Community Health - Deputy Chief Advisor/Health System Strengthening - Health System Strengthening - Health Promotion - Information, Education and Communication (IEC) - Nutrition - Public Finance Management 1/Health Finance Management

	- Project Coordinator 1/Training Management 1/Non-Communicable Diseases (NCDs) - Project Coordinator 2 - Training management 2/Public Finance Management 2 ➢ A total of 12 experts were deployed to 9 posts in the second term (89.93 PM in total, of which 50.14 PM were for work in Japan). - Chief Advisor/Community Health 1/Nutrition 2 - Health System Strengthening - Health Promotion - Information, Education and Communication (IEC) - Nutrition - Public Finance Management/Health Finance Management - Project Coordinator 1/Training Management 1/Non-Communicable Diseases (NCDs) /Nutrition 1 - Project Coordinator 2/Training Management 2 - Community Health 2
Japanese training	➢ The first batch of the training was held in Japan in May 2018, and a total of six participants were invited, including one from the Ministry of Health, two from GHS Headquarters, two from the Regional Health Directorate and one from the District Health Directorate. ➢ The second batch of the training was held in Japan in November 2019, with a total of six participants invited, three from GHS HQ and three from the Regional Health Directorate.
Equipment supplied	➢ The main equipment items provided by the Project to the CPs in the first term were Project office equipment for the establishment of offices in the three regions, including safes, desktop computers, laptops, photocopier parts, printers, projectors and air conditioners. ➢ Equipment costs for the first term: 21,188 thousand yen ➢ Safes, desktop computers, laptops, photocopier, printers, projectors, UPS, medical equipment and materials for the control of COVID-19 etc. were provided to the CPs by the Project in the second term. ➢ Equipment costs for the second term: 129.082 thousand yen
Expenditure on strengthening overseas operations	➢ The first term expenditure：163,871 thousand yen ➢ The second term expenditure: 355,177 thousand yen (estimated amount as of the end of September 2023)
Total input budget by Japanese side	➢ 1,209,707 thousand yen (estimated amount as of the end of September 2023)

With regard to the extension of the project period mentioned in Section 1.7 (Duration of the Project) above, it was necessary to extend the project timeline due to the COVID-19 pandemic. Travel to Ghana was suspended from April 2020 to May 2021 due to restrictions imposed by the Ghanaian Government on the entry of foreigners. During this period, Japanese experts remotely managed the activities and prepared the tasks with the assistance of local project staff from Japan. Consequently, person-months originally allocated for local operations were redirected for use in domestic operations. In addition to this reallocation, a total of 14.6 person-months were added due to the nationwide dissemination of activities in Output 1, which was not originally included in the scope, in response to a request from the GHS.

Additionally, a new module on COVID-19 and post-training monitoring was introduced for in-service community health workers in Output 4.

With regard to the costs of field activities, additional expenses were incurred for office maintenance during the extended period and for the procurement of consumables and equipment related to COVID-19 prevention. In addition, due to the deteriorating security situation in the northern regions where are the project area, travel restrictions were imposed on the area in terms of security measures, which necessitated a change of meeting and training venues. These extra expenses, along with costs associated with the nationwide dissemination of activities, resulted in a total increase of 58,894,000 yen in general operating costs.

1.8.2 Ghanaian side input results

Input results on the Ghanaian side are shown in Table 1-7.

Table 1-7: Input results (Ghanaian side)

Input details	Track record
Counterpart	➢ National level: the GHS HQ - Project director: Director General of the GHS - Project coordinator: Director for Policy Planning, Monitoring and Evaluation Division - Family Health Division, Research and Development Division, Human Resource Development Division, Institutional Care Division, Public Health Division staff ➢ Regional level: management teams of the five target Regional Health Directorates (RHDs) - Project manager: Regional Directors of Health Service - Other regional level departments/units concerned ➢ District level: DHMTs
Office space	➢ Provided office space within UW, Northern and UE regions. Shelves for filing and office utilities paid for.
Local cost	➢ Part of the Project implementation budget

1.9 Linkages with Other JICA Projects and Development Partners in Ghana

The Project sought to link other JICA health sector projects that were simultaneously implemented in Ghana.

The content of the Maternal and Child Health Handbook developed by the Project for Improving the Continuum of Care for Mothers and Children through the introduction of the Combined MCH Record Book (MCH PB Project) (April 2018 to January 2022) was incorporated into this Project's CHO/SDHT refresher training. This strengthened capacity of CHOs at CHPS level on MCH, which was outside the scope of the MCH RB Project, and supported the activities of the MCH RB Project. For the Ensure Mothers and Babies' Regular Access to Care (EMBRACE) Program (Jun 2012 to March 2016), there was no direct linkage, but the findings from the study were incorporated into the development and training of the Maternal and Child Health Handbook by the MCH RB Project.

The Preparatory Survey for the Project for Improvement of Health Facilities in the Northern Region (March 2019 to February 2020) aimed to improve the equipment of upper medical institutions receiving referrals from the CHPS, and it was expected that the Project would strengthen referrals from the CHPS. However, due to delays in implementation of activities, the expected collaboration could not be carried out. With the Project for Quality of Care for Maternal and Newborn Health with Focus on 5S-KAIZEN-TQM (May 2022 to May 2027), the Project supported the 5S-KAIZEN project's activities to improve the quality of maternal and child health and to strengthen referral capacity through information sharing related to health facilities and referral activities in NR.

With regard to collaboration with development partners, the project has enhanced a monitoring tool initially developed for health facilities, primarily clinical facilities, by the United States Agency for International Development (USAID) in collaboration with the Ghana Health Service (GHS). This enhancement aimed to adapt it for use at the CHPS level. Subsequently, the improved tool was integrated into both USAID's and the national monitoring systems, with support from the Project, including its digitization. In addition, training materials developed by the Project for CHMCs and CHVs have been adopted and used as training materials for the USAID's CHMC support program. The United Nations Development Programme (UNDP) and the Korea International Cooperation Agency (KOICA) were provided with CHPS data in the project target area. The CHMC/CHV training materials were also provided to UNDP. UNDP printed and utilized these materials, some of which were also shared with the Project.

Chapter 2: Activities

2.1 Activities Related to Output 0

Output 0 includes activities related to project management and monitoring, including baseline and end-line surveys. In addition to the Joint Coordinating Committee (JCC), the highest decision-making meetings of the Project, coordination meetings for the five regions, and regional management meetings for working-level coordination in each region were held regularly. Through these meetings, the Project shared good practices and lessons learned, strengthened the relationship with the Ghana Health Service (GHS), and reached consensus with the regional and district levels, even though these activities were not the official parts of the Project Design Matrix (PDM). District Health Management Team (DHMT) meetings for district directors and their technical teams were also held to enhance understanding of the Project framework and district level activities.

Table 2-1: Output 0 Activities

[Output 0] The project is monitored and evaluated periodically, and good practices and lessons learned are shared with other regions and GHS HQ for scaling-up.	
Activities in the PDM	**Items to be described in this report**
0-6. Conduct baseline survey 0-2. Monitor the progress and review the effectiveness of CHPS implementation periodically 0-3. Conduct field visits for technical exchange among regions and GHS HQ 0-4. Inform Ministry of Health (MoH)/GHS HQ and modify the project approach (strategy) when necessary 0-5. Conduct end-line survey 0-6. Compile evaluation report reviewed by MoH/GHS HQ and disseminate it nationwide	(1) Implementation of the baseline and endline surveys (Activities: 0-1, 0-5) (2) Implementation of monitoring study visits (Activities: 0-2, 0-3, 0-4) (3) Conducting study tours (Activity 0-3) (4) Organising meetings related to the Project management (Activity 0-4) (5) Implementation of activities related to dissemination of activities (Activity 0-5) (6) Implementation of the trainings in Japan (not on the PDM)

2.1.1 Baseline and End-line Surveys

The baseline survey was conducted in three northern regions according to PDM indicators. The results of the survey up to the end of the first term were shared with the stakeholders at the 2nd JCC in June 2018. The baseline survey report was submitted to the GHS and Japan International Cooperation Agency (JICA) in August 2018.

An end-line survey was conducted in the five target regions. It assessed the level of achievement by the Project on the PDM indicators and identified factors related to achievement. In addition to the PDM indicators, the survey identified other qualitative and quantitative aspects that contributed to this achievement. Countermeasures were examined for indicators that failed to reach the target values. The findings of the survey were shared with the stakeholders at end-line review meetings held on 14 February and 15, 2023, after which the end-line survey report was submitted to the GHS and JICA HQ in May 2023.

2.1.2 Conducting Monitoring and Study Visits

The Project had two opportunities to monitor its activities: one was through monitoring by the Ghana Health Service Headquarters (GHS HQ) and the other was a study tour by the JCC members. Visits by the GHS HQ motivated the communities and staff at health facilities. It also gave the GHS HQ the opportunity to observe how communities were implementing activities and the quality of health facilities and services. A summary of the monitoring by GHS HQ is presented in Table 2-2.

Table 2-2: Summary of Monitoring by GHS HQ

Number	Organisation of Participant	Time	Division of Participant
First	GHS HQ and Regional Officials	April 2019	The Policy Planning Monitoring & Evaluation Division (PPMED), Family Health Division (FHD), Institutional Care Division (ICD), and Public Health Division (PHD) (10 participants in total)
Second	GHS HQ	August 2020	PPMED, FHD, ICD and PHD (8 participants in total)
Third	GHS HQ	October 2021	PPMED, FHD, ICD and PHD (10 participants in total)

2.1.3 Conducting Study Tours

The study tour was a program that involved participants from the JCC visiting various project-related sites in the host region, including communities and CHPS, over the course of one to two days. It served as an opportunity to learn from activities in other regions and also served to increase motivation of frontline health workers. From the 2nd JCC to the 5th and then the 7th JCC, study tours were conducted in the host regions combined with the JCCs, and joint meetings and technical exchanges were held in and out of the regions and districts for each output activity. Fewer study tours were conducted in each region than originally planned owing to the impact of COVID-19 and the deteriorating security situation in the Project area. Attempts were made to resume study tours after the 8th JCC, when the pandemic was under control, however, due to the overlap of activities such as the National Dissemination Forum during the same period, it was challenging to coordinate participants' schedules. Thus, the Project was unable to implement study tours resulting in abandoning the tours.

2.1.4 Organizing meetings related to the Project Management

(1) JCC

The Project organized nine JCCs over a six-year period. As mentioned above, the 2nd, 5th, and 7th JCCs were combined with study tours to promote technical exchanges in each activity. Through all nine JCCs, the Project and participants approved the work plans, shared Project progress, approved PDM revisions, and discussed issues. At the final JCC, the 9th one, the levels of achievement of the PDM indicators and

future sustainability plans were presented and discussed. However, due to scheduling conflicts, the Director General of the GHS and the Director of the PPMED of the GHS HQ were unable to attend the National Dissemination Forum and the 9th JCC it was then represented by the Director of the FHD at the GHS HQ. As a follow-up, a final debriefing on the Project outcomes was held on 19 June 2023 for them. The Project outcomes were also reported by the regional director of the Upper West Region (UWR) and the Nadowli-Kaleo District Director, with the participation of three out of the five target regions. Table 2-3 summarises the JCCs conducted to date. The minutes of the 1st to 7th JCCs are attached to the progress reports. Please refer to 'Appendix 8: Minutes of the 8th and 9th JCC meetings for further details.

Table 2-3: Summary of JCC

Number	Time	Place	No. of partici-pants	Content of the meeting
First	28 November 2017	Accra	42	・ Confirmation of the Project outline and strategies ・ Approval of the Project logo ・ Approval of the Project work plan ・ Approval of the modified PDM ver. 1 ・ Discussion on issues and concerns
Second	28 June 2018	UWR	65	・ Approval of the Project progress ・ Presentation of the results of the baseline survey ・ Presentation of the findings of the Training in Japan ・ Presentation of the findings of the Study Tour in the UWR ・ Discussion on issues and concerns regarding Supportive Supervision (SS) and score card ・ Confirmation of the plan for the rest of the first Project term
Third	29 November 2018	NR	82	・ Presentation and confirmation of progress ・ Reporting progress of the activities of participants in the training in Japan ・ Presentation of the findings of the study tour in the Northern Region (NR) ・ Discussion on issues and concerns ・ Confirmation of the plan for the rest of the first Project term
Fourth	10 May 2019	UER	75	・ Presentation and confirmation of progress ・ Presentation of the findings of GHS monitoring ・ Presentation of the findings of the study tour in the Upper East Region (UER) ・ Discussion on issues and concerns ・ Approval of the plan for the second term of the Project ・ Approval of the PDM ver.2
Fifth	23 January 2020	UWR	96	・ Approval of the plan for the second term of the Project ・ Presentation of the findings of the study tour in the UWR ・ Information sharing on the status of CHPS implementation ・ Presentation of the findings of the second training in Japan ・ Discussion on issues and concerns
Sixth	9 July 2021	Accra	58	・ Approval of the extension of the Project and work plan ・ Approval of revised PDM ver. 3 ・ Presentation on the status of CHPS implementation ・ Presentation of the progress of the Project ・ Discussion on issues and concerns
Seventh	26 January 2022	Kumasi	58	・ Presentation on the status of CHPS implementation ・ Presentation of the progress of the Project ・ Presentation on the achievement of PDM ・ Discussion on issues and concerns

Number	Time	Place	No. of partici -pants	Content of the meeting
Eighth	16 February 2023	Kumasi	58	・ Presentation of the progress of the Project ・ Presentation of the strategies for the five regions PDM achievement ・ Presentation on the contribution of the Integrated Supportive Supervision (ISS) to the operation of the Networks of Practice (NOPs):Nadowli-Kaleo District ・ Discussion on issues and concerns
Nineth	14 June 2023	Accra	91	・ Presentation of PDM indicator achievements and sustainability plans ・ Discussion on the issues and concerns

(2) Coordination Meetings for the Five Regions

Coordination meetings were held for the five regions to reach an agreement on their strategies and the coordination of their activities. Table 2-4 summarises all the coordination meetings held throughout the Project.

Table 2-4: Summary of Coordination Meetings of the Five Target Regions

Number	Target regions	Time	Content of the Meeting
First	The three regions	26 June 2018	・ Presentation on Project progress ・ Presentation of the results of the baseline survey ・ Presentation of the findings of the training in Japan ・ Plan for the modification of the work plan and PDM
Second	The three regions	27 November 2018	・ Project briefing for newly assigned RDs ・ Presentation on the status of CHPS implementation ・ Presentation on the progress of the Project and work plan ・ Presentation of the results of baseline survey ・ Presentation on the findings of the training in Japan
Third	The three regions	8 May 2019	・ Presentation on the status of CHPS implementation ・ Presentation of the work plan for the second year ・ Presentation of the modified PDM ver. 2 ・ Information sharing on the management of the Project office during the break between the first and second terms
Fourth	The five regions	21 January 2020	・ Introduction of new members (North East Region (NER) and Savannah Region (SR)) and information sharing on the establishment of Regional Health Directorate (RHD) of new regions ・ Approval of work plan of the second term for each region. ・ Information sharing on the status of CHPS implementation ・ Confirmation of presentation content for JCC ・ Presentation of the modified PDM ver.3 and target setting on indicators
Fifth	The five regions	8 July 2021	・ Introduction of newly assigned Regional Directors ・ Approval of extension of the Project and revised work plan ・ Information sharing on the status of CHPS implementation ・ Confirmation of the modified PDM ver.3 and target setting on indicators
Sixth	The five regions	25 January 2022	・ Information sharing on the status of CHPS implementation ・ Presentation on the status of progress ・ Information on the achievement to PDM indicator values ・ Issues, concerns and challenges

Number	Target regions	Time	Content of the Meeting
Seventh	The five regions	15 February 2022	・ Information sharing on the status of CHPS implementation ・ Presentation on the status of progress ・ Information on the achievement to PDM indicator values ・ Issues, concerns and challenges

(3) Regional Management Meeting

The issues discussed in the regional management meetings included the status of CHPS implementation, Project strategy sharing, follow-up of the regional strategy to ensure the sustainability of the Project activities, and Project coordination and scheduling. Table 2-5 presents details of the regional management meetings held throughout the Project.

Table 2-5: Summary of Regional Management Meetings

Target Regions	Time	Frequency
NR	31 July 2017, 20 March 2018, 22 November 2018, 28 February 2019, and 20 May 2019	5 times
NR, NER, and SR joint management meeting	3 March 2020, 29 September 2020, 9 February 2021, 11 May 2021, and 22 September 2022	5 times
UER	1 and 2 August 2017, 22 March 2018, 3 December 2018, 18 February 2019, 3 February 2020, and 30 September 2020, 18 February 2021, and 25 May 2021	8 times
UWR	24 May 2018, 19 November 2018, 5 February 2019, 28 February 2019, 14 May 2019, 28 January 2020, 6 October 2020, 11 March 2021, and 7 October 2022	9 times

(4) DHMT Meeting

Periodically, DHMT meetings involving the district levels in the Upper East Region (UER), Northern Region (NR), North East Region (NER), and Savannah Region (SR) which became the target regions in addition to UWR. They were held to improve their understanding and to build consensus on Project activities. The participants were district directors, district public health nurses, the Health Information Officer (HIO), and district CHPS coordinators, all of whom are actively involved in CHPS activities at the district level. Furthermore, the roles and responsibilities of CHPS Coordinators at the National, Regional, and District levels were delegated by the Director General, Regional Directors (RD), and District Directors of Health Service (DDHS), respectively, to coordinate, support, supervise, and report on CHPS implementation at the national, regional, and district levels.

2.1.5 Implementation of Activities Related to Activity Dissemination

(1) Dissemination Forums

At the end of the second term, a dissemination forum for the five regions and the national dissemination

forum were held. The first was held in Tamale on 31 May 2023. The results of the end-line survey were presented, and 97 participants attended, including media representatives. A national dissemination forum was held in Accra on 14 June 2023. The presentations focused on the intervention results and impact, with 132 participants attending, including officials from regional and district health directorates in 16 regions across the country, development partners, and JICA officials.

(2) Public Relations Activities

Public relations activities were emphasised as part of the Project's health promotion activities. These activities were meant to promote awareness of the Project and to share the activities with GHS HQ and its development partners. They also aimed to strengthen solidarity with the regions and disseminate the Project's activities to community members. Table 2-6 shows the plan for the public relations activities and the results.

Table 2-6: Summary of Public Relations Activities

Activity	Timing	Details
Development of Project Poster	・ April 2022 ・ February 2023 ・ June 2023	・ Posters with illustrations on Life-course Approach (LCA) and health promotion were developed and distributed to stakeholders in the five target regions. ・ During the 8th JCC and the final dissemination forum, posters highlighting the achievement of each output were created and promoted to participants and media representatives.
Development of Project Calendar (once a year)	・ January 2021 ・ January 2022 ・ January 2023	・ The Project calendars were developed every year and handed to the Counterparts (CPs) and development partners to publicise Project activities.
Development of Newsletter (Twice a year)	・ October 2020 ・ May 2021 ・ January 2022 ・ February 2023	・ The Project developed a newsletter on the latest updates on Project activities and distributed same to CPs and development partners.
Facebook Page	・ March 2022 ・ September 2022 ・ June 2023	・ A Facebook page in English was opened in March 2022. It was updated in September 2022 and June 2023.
Exhibition of deliverables	・ May 2023 ・ June 2023	・ A set of deliverables were exhibited both at the dissemination forum for the five regions and final dissemination forum to promote Project achievements to participants from Accra and other regions, as well as the five target regions.

(3) Creation of Good Practice Collection

At the end of the Project, a collection of good practices was developed. Four examples of good practices are highlighted: district CHO orientation (DCHOO), referral, life-course approach (LCA), and the CHPS database (CHPS-DB). A total of 250 copies were printed and distributed to the GHS HQ, five target regions, and other non-intervention regions.

2.1.6 Implementation of Training in Japan (not on the PDM)

Two training sessions were conducted in Japan, one in May 2018 and the other in November 2019, with

12 key Project Counterparts (CPs) participating. The institutions and positions of the participants are listed in Table 2-7. Training in Japan aimed to strengthen the capacity of healthcare providers to implement and disseminate LCA activities in Ghana, thereby laying the groundwork for policy formulation and strengthening the health system to incorporate LCA-related services into CHPS services. Therefore, the participants visited Saku City and Sakuho Town in Nagano Prefecture, which have many similarities to community healthcare in Ghana and are advanced areas for LCA activities in Japan. The training in 2018 also included a visit to Ota Ward, Tokyo, and learn about urban LCA activities with a view toward the nationwide expansion of LCA in Ghana.

After the training in Japan, a follow-up meeting for the training participants was held in conjunction with the JCC. After the 5th JCC, a follow-up meeting could not be held because of the scaling down of the JCC due to Covid-19. The CPs who participated in the training contributed to the Project through the JCC and decision-making forums, including the implementation of LCA training materials and training.

Table 2-7: List of Participants Trained in Japan

	Name	At the time of the training		Current	
		Organization	Position	Organization	Position
The First Training (May 2018)					
1	Ms Gladys BREW	GHS HQ	FHD, Safe Motherhood Program Coordinator	GHS HQ	FHD, Safe Motherhood Coordinator
2	Dr Winfred Komla OFOSU	GHS UER	Regional Director of Health Services	GHS Eastern Region	Regional Director of Health Services
3	Mr Barnabas Kwame YEBOAH	MOH	National CHPS Coordinator	MOH	National CHPS Coordinator
4	Dr John Wetu ABENYERI	GHS NR	Public Health/Regional Health Directorate, Public Health Unit – Tamale, Deputy Director	Retired	
5	Dr Matthias Pogvi TENGAN	GHS UWR	Acting District Director of Health Service	GHS UWR	Sissala West, District Director of Health Service
6	Ms Esther ADU	GHS HQ	Health Promotion Division, Senior Officer	GHS HQ	Family Health Division, Senior Health Officer
The Second Training (November 2019)					
7	Dr Kwabena Boateng BOAKYE	GHS HQ	Institutional Care Division, Head of Clinical Information	GHS Ahafo Region,	Regional Director of Health Service
8	Mrs Felecia BABANAWO	GHS HQ	Policy Planning, Monitoring & Evaluation Division, CHPS Coordinator	Operations Smile (NGO)	Programs Manager
9	Mrs Eleanor SEY	GHS HQ	Health Promotion Division, Acting Director	Retired	
10	Dr John ELEEZA	GHS NR	Regional Director of Health Services	Retired	
11	Dr Osei Kuffour AFREH	GHS UWR	Regional Director of Health Services	GHS Oti Region	Regional Director of Health Services
12	Dr Josephat NYUZAGHL	GHS UER	Public Health Division, Deputy Director	GHS UER	Deputy Director of H

2.2 Activities Related to Output 1

Output 1 is primarily an intervention to expand and strengthen CHPS implementation and is largely related to the expansion of the functioning CHPS to enhance the delivery of health services. Therefore, the indicator targets for Output 1 were the same as those for Project Purpose 1, 2-1, and 2-2.

The specific activities of Output 1 are (1) the development and introduction of the CHPS-DB system, (2) the establishment of the Community Health Officer (CHO) training system, (3) the improvement of the referral system, (4) the strengthening of a monitoring system through the introduction of Supportive Supervision (SS) and (5) the District Health Quarterly Performance Review Meeting (DHQPR meetings). (1) was implemented in all regions of Ghana, (2) and (5) in the five target regions, and (3) and (4) in the pilot districts in the NR, UER, and UWR.

Table 2-8 shows activities for Output 1. In this table, the list of activities in the PDM are shown on the left side. The report, however, describes more than five activities as shown on the right side of the table in more detail. This was created to make it easy for readers to understand. It should be noted that activities 1-9 listed in 'the activities in the PDM' were conducted as part of the study tour under Output 0. To that extent, they have not been included in the Output 1 activity.

Table 2-8: Output 1 Activities

【**Output 1**】The capacity of CHOs and health management teams (SDHT, DHMT, and RHMT) to plan and implement CHPS policy by national standards is strengthened.	
Activities in the PDM	**Items to be descried in this report**
2-10. Establish CHPS database system to assess progress of CHPS implementation 1-2. Assess the current progress of CHPS implementation 1-3. Plan trainings for CHOs, SDHT and DHMT, referral and SS 1-4. Modify the training materials 1-5. Assign/train the trainers for trainings 1-6. Conduct the trainings 1-7. Conduct follow-up of the trainings 1-8. Support standardized supervision regularly 1-9. Plan and conduct intra/extra joint learning among target districts/regions (e.g. develop videos of good practices) 1-10. Standardize training materials to be shared for national scaling-up	(1) Development and introduction of the CHPS database system (Activities: 1-1, 1-2, 1-4, 1-5, 1-6, 1-7, 1-9, 1-10) (2) Establishment of the CHO training system (Activities: 1-4, 1-5, 1-6, 1-7, 1-9, 1-10) (3) Improvement of the referral system (Activities: 1-3, 1-4, 1-5, 1-6, 1-7, 1-9, 1-10) (4) Introduction of the SS (Activities: 1-3, 1-4, 1-5, 1-6, 1-7, 1-8, 1-9, 1-10) (5) Introduction of the DHQPR meeting (Activities: 1-6, 1-7)

2.2.1 Development and Implementation of the CHPS Database

The CHPS-DB manages and monitors the current progress of the CHPS implementation introduced in UWR in prior projects. The CHPS coordinators and HIOs of each district collect data from each CHPS; subsequently, the regional CHPS coordinators and HIO integrate the district data. Quarterly data consist of necessary information for developing the CHPS implementation strategy and for entry of CHPS information from the District Health Information Management System 2 (DHIMS 2). Each district and region can develop a strategy for CHPS implementation to train human resources, allocate resources, and mobilise resources by analysing the data. In addition, the data were used to improve the accuracy of the DHIMS 2 data.

The overview of the CHPS-DB is provided in Table 2-9.

Table 2-9: Categories and Items in CHPS-DB

Category	Item	Category	Item
General	The number of CHPS zones and population coverage	Facilities and Equipment	Condition of compound
	The number of Sub-District Health Teams (SDHTs)		Type of construction sponsor
	The number of Electrical Area		Accommodation Availability
	The number of CHPS zones		Availability of equipment
Human Resource	The number of CHOs		Availability of refrigerators
	The number of Community Health Nurses (CHNs)		Availability of official Motorbike
	The number of enrolled nurses		Availability of electricity
	The number of midwives		Availability of water
	The number of other staff		Availability of toilet facilities
Community	The status of Community Health Action Plan (CHAP) implementation		Availability of communication network
	The number of active Community Health Management Committee (CHMC)	Service Delivery	Availability of services
	The number of active Community Health Volunteers (CHVs)	Others	Remarks

The Project was initially expected to draft a scorecard to evaluate the status of CHPS implementation in the target regions. However, the Project proposed CHPS-DB, which has already been introduced and proven effective in the UWR, as an alternative tool for scorecards. In agreement with the CPs and JICA, the Project introduced the CHPS-DB to all the Project regions. Furthermore, the Project worked on developing a sustainable mechanism for CHPS-DB to support CHPS implementation. This activity was added to the PDM revision approved by the JCC in May 2019. Table 2-10 summarises the activities implemented by the Project in chronological order.

Table 2-10: Project Involvement in Development and Implementation of the CHPS-DB System

Date	Activity	Remarks
July 2017 to February 2018	The introduction meetings of CHPS Database (1st and 2nd)	NR and UER
March 2018	・The first CHPS-DB introduction meeting in the UWR ・The development of CHPS-DB and conduct of capacity building trainings for regional and district officers in the NR and the UER	
July 2018	・The third CHPS-DB meeting in the NR and UER and capacity building trainings for regional and district officers ・Start of the quarterly data collection	
February 2019	CHPS-DB revision meeting	
February 2020	The CHPS-DB introduction meetings in the NER and SR and capacity building trainings for regional and district officers	
July 2017	Development of the CHPS-DB manual	
September 2021	The CHPS-DB orientation in the ER	
November 2021	The national dissemination meeting of the CHPS-DB	For 10 regions; 3 days from Nov.16 to18.
January 2022	The joint feedback meeting for the five target regions	

Date	Activity	Remarks
February to August 2022	・The CHPS-DB orientations (9 regions) ・Feedback meetings (8 regions) ・Joint regional CHPS-DB feedback meeting (8 regions)	
March 2023	・The CHPS-DB orientation (Ashanti Region) ・The CHPS-DB feedback meeting (Central Region)	
June 2026	・ The CHPS-DB feedback meeting (Ashanti Region) ・ Joint regional CHPS-DB feedback meeting	

(1) Development and Implementation of the CHPS-DB

The CHPS-DB organises and accumulates information related to the CHPS in each district. The data were used to aggregate and integrate district-level data at the regional and national levels. This makes it possible to monitor CHPS implementation at each level, from district to nation. Additionally, the DHMT can collect relevant data for DHIMS 2, a national health information management tool based on the results of the CHPS-DB. Therefore, CHPS-DB has a complementary role in improving the accuracy of DHIMS 2. CHPS-DB was first introduced to the UWR in the previous JICA project. The Project subsequently introduced CHPS-DB in other regions.

The implementation processes included 1) conducting an orientation for regional and district CHPS coordinators and HIOs to collect the initial dataset, and 2) creating an initial database based on the collected data, which was reviewed with stakeholders through feedback meetings to complete the regional CHPS-DB. The regions and districts were tasked with updating these quarterly data, and the results were used to check the status of CHPS operations and consider the necessary actions. The Project followed these steps to disseminate the CHPS-DB to the Project target regions (NR, UER, NER, and SR) and nationwide. In the process of national implementation, the CHPS-DB was revised in February 2019 by GHS HQ officials to align it with the CHPS policy. The revisions included firstly, adjusting the formula to confirm the staffing of CHOs defined in the CHPS implementation guidelines and the availability of functioning CHPS more accurately and secondly, adding data items on water, electricity, and equipment conditions at CHPS facilities to assess the quality of CHPS services. In July of the same year, a training manual for the CHPS-DB was developed to facilitate dissemination to regions and training of new staff.

(2) Strengthening the Capacity of CPs to Utilise the CHPS-DB

The Project continued to strengthen the CPs' capacity to effectively use CHPS-DB. CHPS-DB meetings were held quarterly and semi-annually in the five regions at the beginning of implementation. Its objective was to confirm the consistency of the submitted data and to analyse the issues in CHPS implementation in their region and district. According to this data, the performance of CHPS implementation based on these data was also shared at regional management meetings, coordination meetings for the five regions, and even JCCs. Based on the data, the Project and CPs discussed and developed CHPS implementation strategies. CPs can now accurately identify gaps in CHPS implementation, and DHMTs now have the

capacity to create activity plans with definite targets, such as the demarcation of CHPS zones and the allocation of human resources, to improve CHPS status. Furthermore, CHPS-DB enabled CPs to identify equipment shortages at each CHPS facility in the five Project regions. This led to the securing of additional support from JICA to address the equipment gap. These accumulated activities have significantly improved the indicator of the Project Purpose, 'The percentage of people who have access to functional CHPS'. Through these processes, the capacities of the CHPS units in the five target regions were strengthened. Since 2020, the CPs have taken their own initiative to decide and hold CHPS-DB meetings based on their needs.

(3) Dissemination of the CHPS-DB

The Project started in the Eastern Region (ER) in 2021 and proceeded with the nationwide rollout of the CHPS-DB, with all regions implementing the CHPS-DB by the end of Project activities in July 2023. At the end of June 2023, a joint CHPS-DB feedback meeting was held for all regions of the Project. The progress of CHPS implementation in the country was shared, following which issues and sustainability of CHPS-DB utilisation were discussed with stakeholders at meetings.

A peer support strategy, a mechanism whereby the five target regions support the assigned regions, was adopted during the national rollout of the CHPS-DB. In this setting, Japanese experts and the Project only provided logistical support, while the CPs in the northern regions provided technical support. The approach was very successful, and the five target regions took on leadership roles, which helped further increase their ownership of the CHPS-DB. This formed a foundation for other regions to continue strengthening their capacity and operating the CHPS-DB after the Project ends.

Nationwide dissemination of the Project was successful owing to the involvement of the Director General and the Policy Planning, Monitoring, & Evaluation Division (PPMED) at the GHS HQ from the onset. Specifically, their recognition of the effectiveness of the CHPS-DB and their direct request for regions to adopt it enabled its rapid dissemination. In addition, the good example of ER, which managed to conduct CHPS-DB training through its own funding, motivated other regions to secure funding for similar training. Consequently, the only cost incurred by the Project in rolling out the CHPS-DB to other regions was the travel expenses of the facilitators from the five target regions.

(4) Consideration of Issues for the Future

The introduction of the CHPS-DB enabled CPs to accurately grasp the status of CHPS operations and engage in strategy-led activities. It also positively impacted the willingness of CPs to train CHOs, which is discussed in the next section. However, several issues remain to be addressed in the future operations of the CHPS-DB. For example, regular data updates for each district and region, and the quality of the data depend on the capacity and commitment of the person in charge. Furthermore, there is a case of data inconsistency

between CHPS-DB and DHIMS 2 owing to the non-utilisation of CHPS-DB for the data entry of DHIMS 2. Continuous capacity building for HIO and CHPS coordinators remains important. Furthermore, urban CHPS zones, which are adapted to the needs of large cities, often lack CHPS compounds and motorcycles. Additionally, as the sense of community connection can be thin, and there may be a shortage of Community Health Management Committees (CHMC) and active Community Health Volunteers (CHV) in these areas . The GHS HQ is currently examining the function of urban CHPS zones to apply a specific definition. The CPs have a similar opinion and have confirmed with the GHS HQ at the JCC that this is an issue that the GHS should address while moving forward. Once the definition is set, some parts of the CHPS-DB require revision. There is also a need to better understand the use of the CHPS-DB in CHPS implementation and its benefits for regional CPs and to motivate them to update the data regularly. To this end, it is important to increase the number of good practices which each region has used to develop specific strategies. Their implementation has led to improved CHPS operations, with the support of the GHS HQ and the five target regions as peer supporters. The Project believes that the implementation of the CHPS in Ghana will surely expand and strengthen through these efforts. Each of these issues was recognised at the ninth JCC held at the end of the Project and at subsequent feedback meetings with the RDHS in the five target regions and key CPs. The CPs in the concerned regions suggested measures to improve the data, such as conducting regular data reviews within the regions and following up with the GHS HQ (PPMED) (e.g. follow-up for defining urban CHPS).

2.2.2 Establishment of CHO Training System

The assignment of CHOs to CHPS zones is one of the conditions for a 'functional CHPS' as defined by Ghana. Therefore, training CHOs is essential to advance the CHPS policy, and the number of CHOs is one of the key indicators for evaluating CHPS implementation. The Project has supported the development of a strategy for CHO training which includes implementing efficient and effective training and establishing a sustainable system for training. Table 2-11 summarises the activities concerning CHO training activities that have been conducted to date.

The main activities concerning CHO training conducted by the Project are 1) the implementation of CHO training, 2) the introduction of pre-service training, and 3) the introduction of district CHO orientations. The purpose of the first activity was to disseminate the experience and knowledge gained in the UWR to the other four regions, while the other two activities aimed to develop a sustainable system for training CHOs. These activities are linked and contribute to the overall improvement of the CHO training system.

Table 2-11: Project Activities Related to CHO Training

Date	Activity	Remarks
November 2017	Introductory meetings on Pre-service training/District CHO orientation (DCHOO)	Regional Director of Health Service in UWR, NAP, NAC
July 2018	Strategic meeting on harmonized CHO training (3 regions)	

Date	Activity	Remarks
The end of July to August 2018	1. Harmonized CHO training in the UWR 2. Harmonized CHO training in the NR	1. Combined with TOT for the NR and UER. 2. The training includes facilitators from the UWR and the NAP
October 2018	Harmonized CHO trainings in the NR	Participated by the facilitators of UWR and UER
December 2018 to January 2019	1. Meeting on the DCHOO in the UWR 2. The study visit to the NAP in Jirapa, UWR	2. The schoolteachers from the NAPs in the NR and UER participated.
February 2019	1. Harmonized CHO trainings in the UER 2. Preparatory meeting for DCHOO in the pilot districts (UWR)	1. The schoolteachers from the NAP/NAC/MTC participated.
March to April 2019	1. Implementation of DCHOO in the pilot districts 2. Joint feedback meeting on CHO training (3 regions)	1. Wa, Jirapa in the UWR 2. NR, UWR, UER
May 2019	Feedback meeting on DCHOO (UWR)	All districts of UWR
November to December 2019	Harmonized CHO training in the UWR	
January 2020	N&MC Pre-service curriculum review meeting	
February to March 2020	Harmonized CHO trainings in the UERT The introductory meeting on the DCHOO (UER, NR, NER, SR)	Participants include those from the SDHT
August to September 2020	Joint harmonized CHO trainings (3 regions)	
May to June 2021	Harmonized CHO trainings in the NR, NER, SR and UWR	The NR and UWR conducted in combination with the district CHO orientations.
December 2021	Official release of the revised school curriculum by the N&MC	
May 2022	Orientation for pre-service training curriculum in Tamale	Targeted all the schoolteachers of NAP, NAC, MTC in 5 regions
September 2022	National orientation for pre-service trainings curriculum	Jointly conducted with the MOH, On-line meeting
April 2023	Joint feedback meeting on the DCHOO	The GHS HQ, the target five regions, the ER, BER and GAR
May 2023	Finalization and distribution of the district CHO orientation Field Practicum Guide	

(1) Implementation of CHO Training

CHO training is essential for ensuring the quality of health services provided by the CHPS. The main targets of the training are Community Health Nurses (CHNs), nurses, and midwives. Participants receive two weeks of training on basic community health services, consisting of one week for theory and another week for field practice. Given that the UWR had already established an effective management system for training from a previous JICA project, the Project utilised the foundation of the UWR by sharing its know-how and skills with the rest of the JICA target regions. The implementation of CHO training was delayed by approximately one year due of the national revision of the CHO training module. In July 2018, the Project began supporting the regions in conducting CHO training.[16] The Project has implemented CHO training under a clear strategy of 'building a foundation for the establishment of a sustainable CHO training system'. For example, the determination of the number of CHOs to be trained and the number of people to be trained in each region was based on data from the CHPS-DB. In addition, the capacity of the DDHS and school

[16] The national CHO training introduced after the revision of the training materials is called 'Harmonized CHO Training'.

tutors from training schools, who play a key role in these activities, has been strengthened, with the aim of introducing DCHOO and pre-service training as the next steps. Sub-District Health Team (SDHT) staff, who regularly provide supportive supervision (SS) to the CHPS, have also been involved as facilitators and observers. To standardise training methods and build relationships between facilitators across regions, the facilitators from other regions participated in CHO training programs organised at the regional level, or joint training programs. As a result of these activities, more facilitators and CHOs have been trained than originally planned. The activities also helped deepen the understanding of CHPS coordinators and DDHS in each region regarding the implementation of CHPS.

(2) Pre-service Training

Pre-service training involves integrating CHO training content into courses at training schools.[17] The cost of CHO training was identified as the major challenge for districts to train the required CHOs, as each training session usually costs approximately 5,000-7,000 Ghana cedis per participant. Therefore, the Project considered incorporating CHO training into the training school curriculum so that nurses could gain the required knowledge and skills expected of CHOs before being employed by the GHS. This approach was originally introduced in the UWR as a sustainability strategy in 2015; hence, the Project first reviewed the status of the training schools in the UWR and then facilitated the introduction of this approach to other regions.

The Project invited teachers from training schools to participate in CHO training, and invited teachers from training schools in NR and NER to school visits at the Nurse Assistant Preventive (NAP) School in the Jirapa Municipality of UWR. Through these activities, school officials and teachers became familiar with the content of the CHO training program. The Project proceeded to discuss how to incorporate the program into the school curricula with relevant stakeholders in the northern regions. It was found that the current field-training program, which required students to live in CHPS facilities for one month, was challenging to operate owing to budgetary constraints. Therefore, the strategy for this Project was to incorporate the theoretical part of CHO training into school curricula while practical part of the training were expected to be conducted at the DCHOO, which will be described later in this chapter.

Furthermore, in February 2020, the Project reviewed the content of the CHO/SDHT in-service training materials for the LCA implemented in Output 4 with school officials in the five regions. The objective of this review was to incorporate LCA-related content into training, and consequently, the Project established a mechanism to ensure the sustainability of training in LCA-related services.

Since 2019, when the national training curriculum for nurses and other health professionals was revised, the Nursing and Midwifery Council of Ghana (N&MC), which is in charge of revising the content, took the

[17] Training schools refer to Nurse Assistant Preventive (NAP) School, Nurse Assistant Clinical (NAC) School, and Midwifery Training.

lead in holding strategy and curriculum review meetings at the centre. The Project participated in every meeting and proposed the incorporation of CHO training into pre-service training and concrete content along with the need for such training. Through these efforts, N&MC officially approved its addition to the new curriculum. Owing to COVID-19, the national revised curriculum was not announced until December 2021, approximately two years after it was planned. In response to this official announcement, the Project prepared supplementary materials for the newly added CHPS- and LCA-related items and conducted orientation sessions to train school teachers in the five regions. The Project also supported the implementation of training programs in pilot schools in each region. Additionally, an online orientation for training school teachers nationwide was conducted in support of the Health Training Institute of the Ministry of Health (MOH). This allowed the integration of CHO training content into pre-services at the national level.

(3) District CHO Orientation

DCHOO was conducted concurrently with activities related to pre-service training. Harmonised CHO Training is typically planned at the regional level and runs as joint training with all districts. Meanwhile, DCHOO is a district-level CHO training program led by the district. It was designed as an alternative to reduce the cost of training, especially the cost of the practical part of the training, which was a major challenge in both national HCT and pre-service training. The Project successfully introduced this new alternative training method to five regions after pilot activities.

The orientation is designed to minimise classroom training and focuses more on practical training in the field. In this approach, the CHNs first attend to 2-3 days of classroom training at the DHMT and are then attached to the CHPS facility for to 4-6 weeks for field training. The CHOs at the assigned CHPS facilities serve as field supervisors, and activities are monitored regularly by the SDHT and DHMT. The advantage of DCHOO is that CHOs can take more time to gain practical experience in the field in a more relaxed and flexible environment compared to HCT, which is a short-term intensive training program. To ensure the quality of the field training, the Project also developed a ‘Field Practicum Guide’ which helps DHMTs standardise field practice content with participants assigned to different CHPS facilities. Figure 2-1 shows the structure of District CHO Orientation.

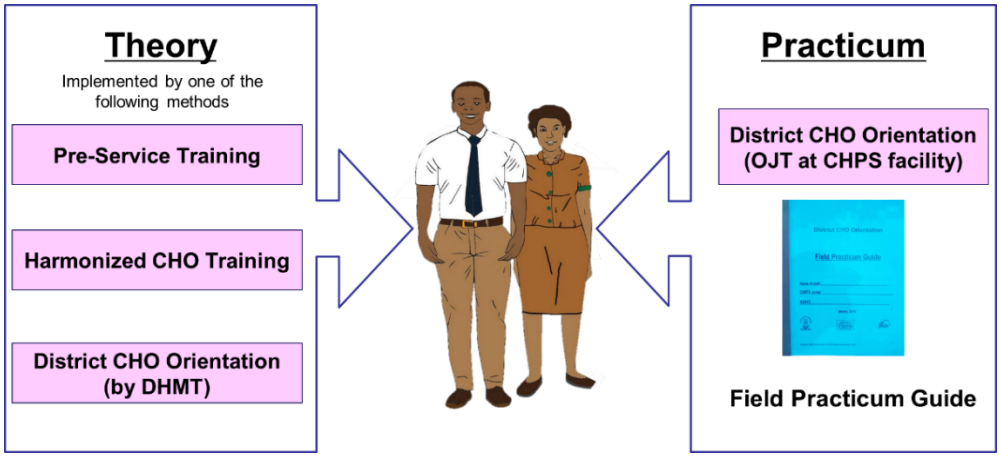


Figure 2-1: Approach to the CHO Training through District CHO Orientations

The Project conducted its first pilot activities in Wa and Jirapa in the UWR in March of 2019. Subsequently, the same approach was introduced to the remaining four target regions, starting in August 2020. In 2021, the NR and the UWR conducted a combined training of 'HCT' and 'District CHO Orientation' for the first time. By the end of the Project, all 55 districts of the Project targets had successfully conducted at least one DCHOO, and a total of 1,136 CHOs were trained through this approach.

The secret to the success of this approach is a tremendous reduction in the burden on DHMTs. There is no need for extensive training preparation as in HCT programs. The cost of training per participant was reduced by about 1/20th of the budget (About GHC 300/person) compared to the usual CHO training. DHMTs only need to make provisions for food during orientation and transportation expenses for monitoring and supervision. In addition, because the organiser of the DCHOO is the DHMT, they can plan orientations according to their needs and availability. These advantages of the DCHOO attracted the interest from other regions. The ER and Bono East Region (BER) took the initiative to adopt the approach in their regions, and the Project provided technical support. At the national dissemination forum held in June 2023, DCHOO was introduced to participants from GHS HQ and other regions through a panel discussion, receiving high praise and gathering interest from many participants. The GHS HQ has also approved DCHOO as an alternative means of conducting HCT.

(4) Consideration of Issues for the Future

Since the beginning, the strategic approach of the Project has established a framework for the sustainable implementation of CHO training and enabled the nationwide rollout of CHO training. DCHOO addressed two major challenges of the GHS: the shortage of CHOs in the district and the lack of a budget for implementing CHO training. Therefore, this approach is widely accepted by the GHS. Additionally, the involvement of a wide range of stakeholders, from health training institutions in the field to the MOH and N&MC, contributed significantly to the achievement of this activity.

However, challenges remain in CHO training. One immediate challenge is the transition period for nursing students who have completed their pre-service education. Owing to the curriculum of training schools, students learn CHPS-related subjects during their school years, typically for two to three years. However, it takes several years for DCHOO to have staff who have acquired theoretical knowledge before employment to become functional. Second, follow-up activities with training schools outside of the five target regions are necessary. Training schools outside the Project region participated only in the online orientation of the revised curriculum. Therefore, follow-up by the MOH and GHS is crucial to ensure that these schools follow the new curriculum. In addition, concerning DCHOO, some districts face challenges with CHPS facilities where trainees can conduct practical training. Some CHPS facilities do not have the standard equipment or experience with CHOs. In such cases, it is difficult for the CHPS to provide trainees with the expected quality of practical training. Finally, several districts pointed out that securing accommodation for trainees was challenging. It is imperative that the DHMT examine these challenges and develop countermeasures to address them. The Project proposed that the DHMT establish a model CHPS zone which is close to the District Health Administration (DHA) and with experienced CHO and basic equipment. The Project also recommends that DHMT prioritise providing equipment and allocating experienced CHO to model the CHPS zone for quality training. In addition, the program 'Networks of Practice (NOPs)' (see Box 2-1 in 2.2.4 below), which is currently ongoing, aims to strengthen clinical facilities, especially health centers. It is possible to utilize these resources for strengthening CHPS levels, as these facilities are managed by health centers

Other medium- to long-term issues include human resource-related matters of the GHS. A large gap exists between the graduates of training schools and the number of staff employed by the MOH. Due to the fact that the graduates are often not hired by MOH immediately, the knowledge and skills they acquire at school may wane or be lost by the time they are deployed. In such cases, staff refresher training after employment becomes essential. Moreover, due to these gaps, it should be noted that the number of graduates from the training schools does not always lead to an increase in the number of the CHOs or functional CHPS zones. For example, while the cost of training is a challenge for DHMTs, they also face the challenge of having no CHNs to train in the district. The lack of CHNs in Ghana is a fundamental concern and a hindering factor in the increase in CHOs and functional CHPS zones. The GHS HQ needs to identify the number of CHOs for CHPS implementation based on the CHPS-DB and utilise the CHO training system introduced by the Project to address the gap in meeting their objectives in CHPS implementation.

These short-, medium-, and long-term issues were shared and discussed with relevant parties through dissemination and feedback meetings of the major CPs after the JCC. The GHS HQ commented that issues related to pre-service retention and employment of human resources will be considered as future issues to be addressed, including follow-up with other departments.

2.2.3 Strengthening the Referral System

The referral system ensures continuity of patient care among CHPS facilities, health centres, and hospitals located within the same geographical area. It is critical to improve the quality of the CHPS services and the credibility of community members as clients. Various factors are intricately involved in improving the referral system, such as transportation, staff allocation, health workers' skills to make necessary referrals at the right time, laboratory service availability, and the capacity of receiving facilities. The Project strengthened the system by improving the management of referral services and focusing on the standardisation of procedures based on national guidelines. Table 2-12 provides a chronological summary of the main activities of the Project. Figure 2-2 also shows the four main components promoted by this activity. The Project originally targeted UWR, UER, and three districts of the NR. Following the division of the NR region in 2021, the activity was implemented in three pilot districts. One district was selected from NR, UWR, and UER.

Table 2-12: Project Intervention to the Referral Activities

Date	Activity	Remarks
January to June 2018	・Strategic meetings and training material review meetings (2 times) ・ Referral orientations in the NR and UER	
July 2018	TOT training for district facilitators	The NR and the UER
September 2018	・Referral training ・The introduction of referral forms and the revolving system	The NR and the UER
January to April 2019	The referral trainings for hospital staff	The NR, the UER and the UWR
August 2020	Development of standard referral telephone directory	
November 2020	Development of monthly referral returns (MRR)	
January 2021	Orientations on the MRR in pilot districts	The NR, the UER and the UWR
June 2021	Referral trainings to the UW regional hospital	
December 2021	Joint referral review meeting with 3 regions	Participants include GHS HQ
January 2022	Technical workshop for integration of the MMR into the DHIMS2	
November 2022	Referral Assessment	Implemented as part of the endline survey
April 2023	Validation meeting on the new referral policy and technical guideline (1st)	Hosted by the MOH
May 2023	Validation meeting on the new referral policy and technical guideline (2nd)	Project-funded

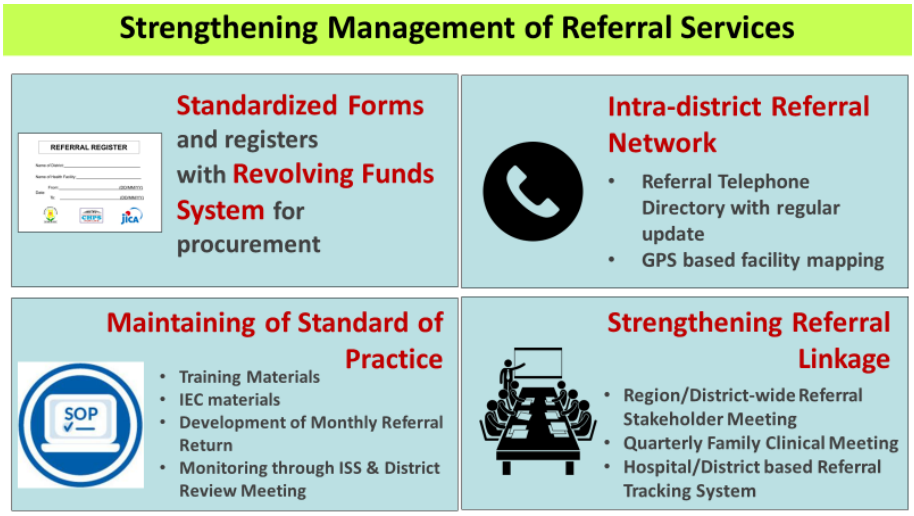


Figure 2-2: Four Major Components Promoted by the Project

At the end of the first term, the Project established a Health System Strengthening Technical Working Group (HSS-TWG) in each region. Throughout the Project years, the HSS-TWG conducted quarterly meetings to develop strategies and plan activities to strengthen the health systems. Referral training and monitoring activities were also discussed with CPs during these meetings.

(1) Introduction of Standardised Referral Forms and Establishment of a Revolving Fund System

A facility assessment was conducted at the beginning of implementation. The assessment revealed that most health facilities do not use a standardised recording format for referral services, which is more often observed in the NR and UER. In addition, many health facilities experienced a shortage of referral resources. To address this problem, the Project first introduced standard referral forms to NR and UER. Standard forms were obtained from the UWR developed in the previous JICA project. Subsequently, UWR's revolving fund system was introduced to the NR and UER to ensure a continuous supply of referral resources to health facilities. In the revolving fund system, the regional medical store, the section responsible for all procurement and sales of health-related commodities in the region, sells referral forms and registers with health facilities at an affordable cost. Sales from referral resources are used to print referral forms, making this a sustainable system for procuring referral forms. The Project has monitored the functionality of the revolving fund system since its introduction and has worked well in all three regions.

(2) Standardisation of the Referral Operation

The Project involved referral training and the distribution of standard referral registers, referrals, and feedback forms. Training was provided to health workers from 549 health facilities in the target areas using training materials revised according to the national referral guidelines. The target facilities included CHPS and SDHTs, hospitals, and private health facilities. In the UWR, the training focused more on hospital staff because many staff members at the CHPS and SDHT had already received training during the previous

JICA Project. The Project completed all the expected referral training in April 2019.

The UWR opened a new regional hospital in January 2020 and required training for its employees of the new hospital. Hence, additional referral training was conducted in June 2020 at the UWR. The training, which was carried out during the ongoing pandemic COVID-19 helped address the strong need to improve employees' knowledge regarding patient referrals at that time. The Project successfully trained 150 health workers at a regional hospital in the UWR.

The Project conducted post-training assessments and field monitoring at the target health facilities to ensure knowledge retention and effective application of the knowledge gained from the training. Additionally, the Project included referral components in supportive supervision and quarterly meetings in the district to enable CPs to monitor referral activities regularly. Field monitoring identified challenges with referral feedback as most CHPS hardly received any referral feedback from upper facilities. Referral feedback is information provided by the receiving health facilities to the referring health facilities regarding the condition and treatment of the referred patients as well as any follow-up needed for the patients after treatment. Sharing such information appropriately allows the referral source, for example, the CHPS, to understand the appropriateness of the diagnosis and treatment provided at the time of referral. It also enables necessary follow-up with the patient after discharge (e.g., medications and periodic checkups) and documentation of the patient's pre-existing conditions and medical history (e.g., medical record keeping and documentation in the Maternal and Child Health Handbook). Thus, referral feedback plays an integral role in the accumulation of staff knowledge and in the practice of ongoing patient care. There are several reasons why referral feedback has not been implemented yet. However, the number of them are due to a lack of understanding and awareness of referral feedback among the staff. Other factors, such as the fact that the referred patients did not go to the health facility to which they were referred, or that the referring facility instructed the patient to deliver the referral feedback, which in turn did not reach the facility, were also found to affect the feedback rate. No personnel at the facility, district, or regional level understood the current referral situation. Therefore, the Project team and the CPs agreed that the Project should prioritise activities to improve referral feedback. One major outcome of this activity was the development 'of Monthly Referral Returns (MRR)' to periodically review the actual referral situation. This report is a data-driven tool that regularly reviews referral situations and feedback at the facility level. The Project also utilised the data as an information source to assess the achievement of Project indicators. The data contained in this report also enabled the analysis of trends, including which type of health facility patients were referred to by CHPS facilities. As expected, the data analysis revealed that the sub-district health centres in the NR and UER did not function as gatekeepers of the referral system.

Eighty (80) to ninety (90) percent of the patients passed through health centres and were transported directly to hospitals. The situation came as a shock to all concerned CPs as it means that the health centre as a gatekeeper of referral system is not working at all. It should be mentioned that the monitoring report was

first initiated in UER. The Project finalised the MRR after reviews at the joint HSS-TWG meeting in November 2020 and a one-year pilot operation. Furthermore, with the support of the GHS HQ, the MRR was incorporated into DHIMS 2, a GHS health information platform.

During the trial implementation of the MRR, it was decided that the Project would carry out referral activities in only one pilot district: UWR, UER, and NR. This decision was made due to the need to develop an approach to improve the referral system. The three selected pilot districts were Savelugu in NR, Nadowli-Kaleo in UWR, and Talensi in UER.

(3) Establishment of a District-wide Referral Network and Strengthening of Referral Linkage

The introduction of a monthly referral monitoring report has drawn attention to the issue of referral feedback from the CHPS facilities. Therefore, follow-up activities were implemented mainly by the HSS-TWG in each region. A referral network was established among regional and district health facilities to strengthen their linkages and increase referral feedback. Specifically, the Project held stakeholder meetings at the regional and district levels, developed a standard referral telephone directory, and implemented it in pilot districts. Nadowli-Kaleo made district-wide efforts by holding quarterly family clinical meetings with key healthcare providers at each level, including hospitals, the DHMT, the SDHT, and the CHPS. At regular meetings, all the participants discussed issues intensively and identified measures to improve referrals.

Furthermore, UER has developed Information Education and Communication (IEC) materials to improve the referral process and flow at both the health facility and community levels. The region has produced several unique innovations to improve referral services and created a regional model referral district. In addition to MRRs, district hospitals in the pilot districts also devised solutions to improve referral feedback. For example, a 'referral tracker' record book was developed as their initiative to track the status of issuing referral feedback at the facilities. These regional attempts and experiences were shared with officers at the national and regional levels through a joint HSS-TWG meeting with the five target regions.

(4) Consideration of Issues for the Future

With the successful implementation of the aforementioned activities, referral services improved in the pilot districts. The referral assessment conducted during the end-line survey showed that the Nadowli-Kaleo District of the UWR scored 100% in proper referral services according to the national guidelines. In addition, the Talensi District of the UER achieved a PDM indicator target of 60% referral feedback rate. Facility visits by a Japanese expert at the end of the Project also confirmed good collaboration between district hospitals and DHMT to improve referral services. The Project amplified details of such good collaborative work at the dissemination forum and shared good documentation practices with other regions and the GHS HQ.

Furthermore, while it was not included in the PDM indicators, the Project worked extensively to promote a set of referral documentation, such as referrals and referral feedback forms and registers to the national level for their adaptation. In April and May 2023, the MOH and the GHS HQ held a validation meeting for the new national referral policy and implementation guidelines. At these meetings, the Project presented the forms with a detailed explanation of their significance in strengthening the referral system in the pilot districts. Referral documentation was approved by the MOH, and all stakeholders were included in the new referral policy and implementation guidelines. Hence, the policy document, which is expected to be released around the end of August 2023, will have Project-supported referral documentation with minor revisions.

As with the CHPS-DB, some minor issues, such as the timely submission of the MRR and data quality, require improvement. However, the Project demonstrated a high commitment in the northern regions and districts to address this challenge. The upcoming national referral policy will likely motivate them to improve their referral services. The Project believes that the referral system will steadily improve as regions and districts continue to implement current referral activities, even after the Project is completed.

Referral issues have been shared with the GHS HQ and the CPs in the five regions, and the CPs have shown that they would like to leverage meetings and training opportunities in accordance with the introduction of new national guidelines and the implementation of NOPs (see Box 2-1 in 2.2.4 below) to enhance the use of referral tools and feedback.

2.2.4 Supportive Supervision (SS)

The Project has supported the implementation of quarterly supervision from SDHTs to the CHPS to monitor the quality of health services at CHPS facilities. Implementing regular supervision contributes to strengthening CHO's skills in providing appropriate MCH and LCA services, referrals, and community participation activities. During the first JICA project, a Facilitative Supervision System (FSV) was established at the UWR as a regular monitoring system. Therefore, the Project initially planned to roll out the FSV to other northern regions. However, it became necessary to change that plan due to the emergence of a new national program called 'Supportive Supervision (SS)', which came in right after the Project started. Many consultations were held with relevant stakeholders, including the GHS HQ and JICA, to streamline Project activities. It was then decided that Project activities would be limited to supervision from the SDHT to the CHPS as a pilot activity. The focus on CHPS supervision was agreed upon as it aligned well with the Project Purpose, which aimed to strengthen CHPS functionality. The four selected pilot districts were Savelugu and Nanton in the NR, Talensi in the UER, and Nadowli-Kaleo in the UWR. Table 2-13 summarizes the involvement of the Project in this activity, in chronological order. An HSS-TWG was established for this activity in each region. This committee played a central role in reviewing the training contents and checklists and implementing and monitoring training in the pilot districts.

Table 2-13: Project Involvement in Supportive Supervision Implementation

Date	Activity	Remarks
January 2018	Strategic meeting on Facilitative Supervision (FSV) activities and actions during transition period before the national SS program	The GHS HQ ICD、Regional officials in the UWR
April 2019	Discussion with the SS Program Officers at the GHS HQ and USAID representatives	
May to October 2019	・The national TOT training on SS Program in Accra ・Implementation of the national SS trainings at regional and district level (by the GHS HQ/USAID) ・Start of the national SS program	The NR: June The UER: September The UWR: October
January to December 2019	SS material review meetings for CHPS supervision	Held both in UWR and Accra
January 2020	Finalization of the SS activity by the Project and selection of pilot districts	The scope of SS activities decided by the 5th JCC
February 2020	Joint SS material review meetings with the three regions	The finalized SS training materials and checklist for CHPS
March 2020	Preparatory meeting and implementation of the SS training (UWR)	For SDHT officials in Nadowli in the UWR
April 2020	Start of CHPS supervision in Nadowli, UWR	
May to June 2020	・Feedback meeting on the SS training in Nadowli, UWR ・Development of SS monitoring tool and the SS database ・Distribution of SS checklists to target districts	
July to August 2020	・Preparatory meeting and implementation of the SS training (UER, NR) ・Start of SS in pilot districts (UER and NR) ・SS review meeting in Nadwli, UWR	
November to December 2021	1. National SS lesson learnt meeting 2. SS review meetings in the UER	1. Hosted by the GHS HQ
November 2021	1. TOT training on the SS digital checklist (HNQIS) at national level (by GHS HQ/IM) 2. Modification of PDM indicators for SS	1. The Project staff participated as observers. 2. PDM ver. 3
December 2021	SS lesson learnt meeting in pilot districts	Hosted by the Project
August 2021	The review meeting for the SS checklist digitization for CHPS	Accra, PPMED, DDG
August to September 2022	Pre-testing of a demo version of the digital checklist in pilot districts of the UWR, UER, NR	
January 2023	Finalization meeting for the digital SS checklist	Participants include GHS HQ and three project regions
April 2023	Orientations of the digital checklist in pilot districts	SDHT officials in the UWR, UER and NR
June 2023	SS feedback meeting in Nadowli	

(1) Development of Training Materials and Tools

Regarding the development of training materials and tools, the following three changes were made:

1) structure and frequency of SS implementation, 2) content of training modules, and 3) checklists. For the first point, the SS team consists of regional and district members of the national SS program. The team was expected to conduct quarterly supervisory visits to health facilities. Performance gaps were identified through data analysis. The staff of the SDHT comprised supervisory teams and conducted supervision visits to their jurisdictional CHPS facilities every quarter. Regarding the second point, a session on CHPS policies and an overview were added to the program, and some content was adjusted to suit the situation of CHPS facilities. for a for the third point, a national SS checklist was developed as a common tool for all health

facility levels including second-tier hospitals. Therefore, the Project customised the checklist to be more appropriate for the CHPS facilities. This involved deleting items not applicable to the CHPS (e.g. items related to clinical services and operational structure of the hospital) and adding items that were needed (e.g. community participation activities, referral, and LCA services). The checklist underwent several revisions throughout the pilot activities, and the final version was approved for digitisation and subsequent integration into the national SS program.

(2) Support for the Operation and Implementation of Supportive Supervision

SS training began in the Nadowli-Kaleo district of the UWR in March 2020. Training in the remaining NR and UER pilot districts was conducted in August 2020, after which all pilot districts began quarterly SS activities. The Project developed 'SS Database' and 'SS Tracker' as tools for monitoring SS implementation at each site and conducted monitoring. In addition, HSS-TWG meetings were held regularly to discuss the implementation status of other activities related to the health system, as well as the operational status, challenges, and follow-up issues in each region.

Quarterly SS implementation faces challenges such as fuel costs for SDHTs to visit CHPS facilities and the unavailability of staff at both SDHT and CHPS (e.g., leaves, retirements, and engagement in other GHS programs). Despite these challenges, UWR and UER were able to ensure relatively stable performance in SS implementation throughout the Project period. These districts often managed the funding problem by riding on the backs of other related health programs as well as Internally Generated Funds (IGF) from the SDHT under their jurisdictions. UWR and UER also have previous experience with FSV, which was supported extensively by JICA and the Korean International Cooperation Agency (KOICA), a situation which may have also contributed to their performance. One major challenge observed in the Nadowli-Kaleo district of the UWR was the supervision of CHPS facilities by health centres under the Christian Health Association of Ghana (CHAG). In one instance, SS activities were put on hold because of the sudden replacement of all staff at CHAG health centres. Because DHMTs do not have the direct power to manage personnel and funding, they had to spend time coordinating with the CHAG and other SDHTs to continue SS to the affected CHPS facilities.

Meanwhile, the SS implementation was unsatisfactory in two pilot districts: Savelugu and Nanton. Significant improvements are required until the end of 2021, particularly in the Nanton District. However, several challenges have been observed in the NR which need to be addressed to improve the situation. These include the DHMT's lack of leadership and interest in activities, and weak supervision and supporting capacity at the Regional Health Administration (RHA) to the districts. The Project had consultations and discussions with the Regional Health Management Team (RHMT) and DHMTs to address the challenge. Moreover, the Project held joint HSS-TWG meetings with other regions to share experiences and good practices from the UER and UWR to motivate the NR to improve its operations. With these efforts, the SS

performance in NR improved significantly during the second half of the Project year.

(3) Sustainability and Dissemination of SS Activities

The SS activities conducted as part of the Project were implemented in only four pilot districts. The Project continued to share its progress and achievements with the SS program coordinator at GHS HQ throughout the Project period. The GHS HQ was initially sceptical of the quarterly supervision of CHPS facilities by the SDHT owing to funding concerns such as fuel costs. However, with the continuous sharing of information, the GHS HQ eventually understood the effectiveness and feasibility of conducting quarterly CHPS supervision through the SDHT. Consequently, the Project intervention resulted in the integration of SS checklists for the CHPS into the national SS program. Integration with the national SS program began with the digitisation of the SS checklist for CHPS. It was first reviewed and drafted in August 2021 and finalised in January 2023 after pilot implementation. The Project provided orientation on the finalised digital checklist for all pilot districts in April 2023. A digitised checklist was also added to the national platform for the SS program, with the dataset saved in the program's database. All regions of Ghana can access a digitised checklist for CHPS supervision.

(4) Consideration of Issues for the Future

Through a series of activities, the Project successfully established a foundation for regular SS in CHPS facilities. However, the Project did not make major revisions to the SS checklist because of its consistency with the national program. In the future, it would be necessary to consider adding and revising items that promote the provision of high-quality health services at CHPS facilities, such as LCA and referral services which have already been included. Additionally, the rollout of the SS within the five target regions is required, as implementation is currently limited to the four pilot regions. Mainstream activities in a region increase sustainability.

However, the outlook for the implementation of SS is positive. The SS grasps the situation and challenges of the services provided by the CHPS, and supervisors and CHPS staff work together to plan activities to solve problems. The end-line survey reported that SS implementation helped strengthen the capacity of CHOs working in CHPS and improved the quality of CHPS services. The study also revealed that SS implementation contributed significantly to maintaining the motivation of CHOs which may positively address the problem of attrition of CHOs and the resultant staff shortage at CHPS facilities. These results clearly show the benefits of SS implementation in the CHPS. This is a promising policy outlook. For instance, the national SS program coordinator at the GHS HQ informed the Project that the SS program would continue to be supported by the United States Agency for International Development (USAID), with plans to expand SS implementation for CHPS. This initiative was supported by the NOPs program, a current GHS strategy to achieve Universal Health Care (UHC). The NOP program focuses on improving the health

system by strengthening the functions of the SDHTs, including their ability to supervise the CHPS. The Project expects that the GHS will leverage the experiences and lessons learned from this Project to develop more effective and high-quality SS programs.

Box 2-1: Networks of Practice (NOPs)

The government's strategy for achieving UHC is in relation to the $150 million Primary Health Care (PHC) Investment Program, one of the Ghanaian government support programs approved by the World Bank in June 2022. The Government of Ghana has been strengthening PHC over the past 20 years through investment in district hospitals and support for CHPS operations. On the other hand, such support has isolated the sub-district health centres located in the middle, causing them to function poorly as critical referral links and gatekeepers between CHPS and district hospitals, and further reducing their capacity to deliver health services. In recognising this, the GHS has been promoting a nationwide network-of-practice strategy to upgrade sub-district health centres to model health centres and to provide organized PHC services through a primary care provider network with these facilities at its core. The strategy focuses on strengthening the capacity and leadership of the sub-district health centres as the effective core of the network, and the CHPS to which they belong as subordinate organizations. At the same time, DHMTs and district hospitals are positioned as key support institutions in technical issues and referral systems; the GHS HQ is developing national operational guidelines based on pilot implementation.

2.2.5 Introduction of DHQPR Meetings (Activities: 1-6, 1-7)

This activity was implemented in all 55 districts in the five target regions. The introduction of DHQPR meetings was initially considered to share supervision results, as in the previous JICA Project. However, the Project had to reconsider this approach because of changes in the scope of SS activities, where the intervention was limited to four pilot districts. As a result of the five joint regions of the HSS-TWG meeting, it was decided that the focus would be on enhancing the quarterly district review meeting, which is part of the existing GHS system but is not functioning well. The objective of the meeting was not limited to sharing the results of supervision but covered other important issues concerning the district's health. The Project is expected to provide the necessary support for strengthening the operation and implementation of such meetings. Furthermore, to clarify the purpose of the meeting, the HSS-TWG decided to change the title of the meeting from a 'District Review Meeting' to a 'DHQPR Meeting'.

(1) Purpose and Content of the DHQPR Meetings

The DHQPR meeting invited all concerned staff from hospitals, health facilities, district Assembly (DA), and other relevant sections or departments involved in the district's health services. It aimed to discuss the status of health services in the district to identify challenges and countermeasures for improvement. Face-to-face meetings strengthen partnerships among key stakeholders in districts. The Project helped them clarify the roles and responsibilities of key participants such as the DHMT, SDHT, CHPS, hospitals, and DA at meetings. The Project also developed a reference guide for meetings, with templates for presentations and the district's action plan. These templates include indicators for CHPS implementation and other Project outputs such as the SS, referrals, community participation, and Health Integrated Annual Action Plan

(HIAP). These activities contributed to the effective implementation of meetings. The DHQPR meeting also served as an opportunity to monitor Project activities.

Using these tools, which were finalised after a pre-test and subsequent review consultation, the Project focused on all district stakeholders (359) in the five target regions from May to August 2021. Subsequently, DHQPR meeting support to each district was provided. The regional-level HSS-TWG members and Project staff attended these meetings for technical assistance and assessment. Since then, the Project has developed a regional-level monitoring tool through a free application called Kobo Collect[18] to continuously monitor the implementation of DHQPR meetings. The end-line survey reported that CPs were exceptionally satisfied with the DHQPR meetings. The CPs also gave high scores to this activity in terms of its relevance and consistency with the policies. This is because quarterly district review meetings were already part of the existing GHS system. Several CPs commented that the DHQPR meetings were a learning experience, especially for the CHPS and SDHT staff, which led to enhanced cooperation between the DA and other stakeholders. For example, there was a case in which an NGO working in Savelugu in the NR was invited to the DHQPR meeting as a relevant stakeholder, and this meeting led to the NGO's support for the CHPS construction. This practice was introduced to stakeholders at dissemination forums.

(2) Considerations of Issues for the Future

Although the DHQPR meetings were highly satisfied with the CPs, there are still issues to be addressed in terms of implementation and management, particularly in the NER and SR where the Project goals could not be achieved. The CPs pointed out that the performance of the DHQPR meeting was affected by budget constraints (e.g., transportation and refreshments for participants), securing venues, and coordinating the schedule with other programs. In terms of quality, some participants expressed dissatisfaction, caused by a lack of coordination with participants before the meeting, especially participants from DAs and hospitals, and poor time management during the meeting. Negative comments and incidents were mentioned in all five target regions.

The status of the DHQPR meetings varies by region. For instance, approximately half of the districts in the NER and SR failed to meet the target of at least two meetings per year. However, the UER successfully conducted quarterly DHQPR meetings in all but one district with safety concerns. The success of implementation in UER and UWR might be related to the active follow-up by RHMTs and strong commitment by DDHS in these regions. The quality of the meeting was also enhanced as participants' understanding and skills improved with each successive meeting.

[18] Kobo Collect is a free application tool used for field data collection in the international cooperation and humanitarian assistance field. Users download a web-based information collection form to a mobile device, such as a tablet or smartphone, and enter information into the form. Once the data is uploaded, the results can be viewed on the web-based management screen. Simple tabulation and analysis of the uploaded data is also performed automatically. The Project used this functionality to develop a monitoring tool for DHQPR meetings in each district.

Meanwhile, the meeting quality did not improve easily in districts with fewer meetings. DHMTs are also confronted with the challenge of maintaining the quality of meetings due to retirement or the transfer of key staff in the district. These factors are likely to affect the performance of NER and SR. The Project shared the results of the performance and challenges of this activity at joint HSS-TWG meetings and JCCs with the five regions and discussed strategies for the improvement and continuity of the activity. All Regional Health Directors (RDHS) are strongly committed to conducting DHQPR meetings. Follow-ups at the regional level and continued commitment by regions and districts are key to the sustainability of activities after the end of the Project. Table 2-14 summarises of the activities related to the DHQPR meeting

Table 2-14: Project Intervention Results for the Introduction of the DHQPR Meeting

Date	Activity	Remarks
February 2021	Joint regional HSS-TWG meeting to discuss the strategy for the District Health Quarterly Performance Review (DHQPR) meeting at district (1st meeting)	The three regions HSS-TWG members
March 2021	Joint regional HSS-TWG meeting to discuss the strategy for the DHQPR meeting at district (2nd meeting): Development of Reference Guide for the review meeting	
April to May 2021	・Pilot testing of the reference guides in NR, UER and UWR ・The third review meetings for the DHQPR meetings by the joint three regions HSS-TWG : The completion of the final version of the DHQPR meeting reference guides	
The end of May to August 2021	Orientation on the DHQPR meeting for the five target regions	359 participants in total
April to May 2022	Support of the implementation of the second quarter DHQPR meeting in the five target regions	

2.3 Activities Related to Output 2

The main activity for Output 2 is strengthening the capacities of the CHMC and CHVs. The CHPS policy indicates that CHVs are required to support the activities of CHOs, whereas CHMCs are required to supervise the activities of CHVs. Furthermore, one of the four conditions required for a 'functional CHPS' is the availability of active CHMC and CHVs. The CHPS National Implementation Guidelines of September 2016 also specify the services CHMCs and CHVs are expected to provide under the CHPS (see Table 2-15 below).

Table 2-15: Services Provided by CHMC and CHV

CHMC	CHV
・ Governance, membership, and operation ・ Selection and supervision of CHVs ・ Welfare of CHO (include Security) ・ Facility maintenance ・ Resource mobilization and management	・ Disease prevention and environmental sanitation ・ Home visiting ・ Home management of minor aliments (integrated community case management) ・ Community outreach

Source: CHPS National Implementation Guidelines, September 2016

In this Project, this output is related to achieving one of the indicators of the Project Purpose, that is, 'The percentage of people who have access to functional CHPS', and, indirectly, to the achievement of Indicator 3-1, that is, 'The proportion of functional CHPS zones which provide LCA related services', through

increased LCA activities by the community.

Thus, although CHMCs and CHVs play an important role in implementing the CHPS, their activities are voluntary, and their implementation depends on each individual's will, motivation, and interests. Therefore, the challenge is to motivate the CHMC members and CHVs to maintain their activities, create an environment for them, and strengthen their capacity to implement community health activities. To address these challenges, the Project developed tools, training materials, and health promotion materials for CHMC and CHVs to proactively begin discussing and analysing community health issues; planning, implementing, monitoring, and evaluating activities; and continuing the cycle of these activities under the facilitation of CHOs. To establish and disseminate these tools and materials, the GHS HQ was involved in developing them into nationally standardised materials. Additionally, nonmonetary incentive (NMI) activities were introduced on a pilot basis to maintain and motivate CHMC members and CHVs to participate in these activities. This report describes the activities of the PDM, organised by the activity items on the right in Table 2-16.

Please note that the direct intervention area for this output was UWR; for UER, NR, SR and NER, indirect interventions were implemented through CHO capacity development, such as CHO training and District CHO orientation described in Output 1.

Table 2-16: Activities of Output 2

【**Output 2**】Community activities of CHPS are strengthened	
Activities in the PDM	**Items to be described in this report**
2-1. Develop standardized community level data capturing tools 2-2. Assess and score current community health activities by the community 2-3. Plan and conduct CHO's community outreach and home visit 2-4. Plan and implement community engagement activities with the support of SDHT, DHMT and DA 2-5. Modify/produce training materials for CHMC/CHV 2-6. Conduct training for CHMC/CHV 2-7. Implement community health activities by the community (e.g., referral system using Community Emergency Transport System: CETS) 2-8. Create sustainable NMI mechanism for the CHO/CHV and community 2-9. Plan and conduct intra/extra joint learning among target districts/regions 2-10. Review/standardize/develop training materials to be shared for national scaling-up	(1) Development and implementation of tools to assess and score achievement of community health activities by the community (Activity 2-1, 2-2, 2-5, 2-6, 2-7, 2-10) (2) Development and Implementation of CHMC/CHV Training Materials (Activity 2-2, 2-4, 2-5, 2-6, 2-7, 2-10) (3) Creation of NMI methods (Activity 2-4, 2-8, 2-1)

2.3.1 Development and Implementation of Tools to Assess and Score Achievement of Community Health Activities by the Community

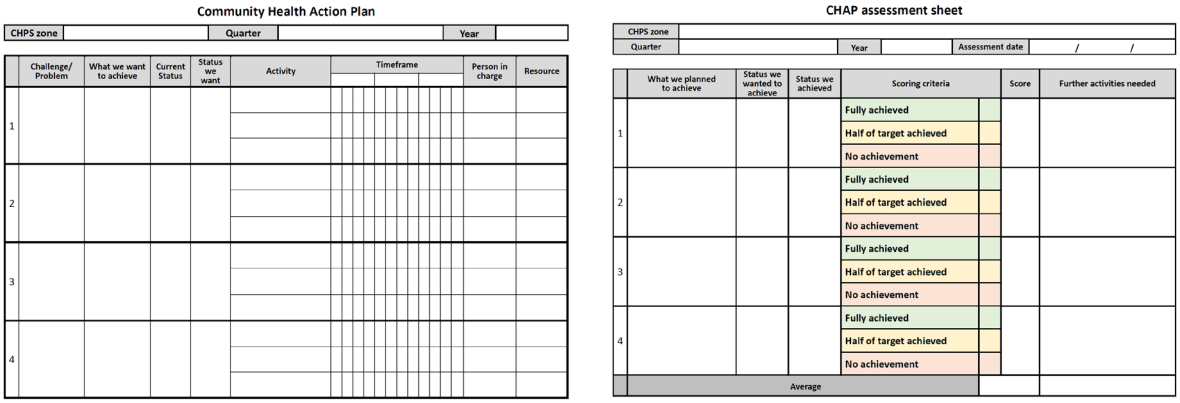
(1) Development of CHAP Assessment Tools

Community Health Action Plans (CHAPs) have been introduced as tools for planning and implementing

community health activities and are already used in many CHPS zones in the UWR. However, the existing CHAP was not formatted to set indicators. Moreover, community members could not measure the progress and achievement of their activities or share their achievements among members to identify successes and areas for reflection. The existing CHAP focuses on activities related to supporting the livelihoods of CHOs and maintaining CHPS facilities and the environment. Although the Community Emergency Transport System (CETS) was introduced, the proportion of community health activities remained small.

Considering this situation, rather than creating a new tool to measure the progress of community health activities by the community, the existing CHAP format was revised to include columns for entering the indicators 'current status' and 'status to be achieved'. Therefore, the community itself can measure its progress. The CHAP also encourages the introduction of community health activities.

To revise the format, a technical working group comprising UWR RHMT and DDHS members was formed in the first term to discuss the items and methods for measuring progress and achievement. Based on these discussions, a revised CHAP format and CHPS assessment sheet were developed to score achievement based on this format (Figure 2-3).



Revised CHAP format CHAP Assessment sheet

Figure 2-3: CHAP Assessment Tools

(2) Implementation of Training for CHAP Assessment Tool Implementation

To implement the CHAP assessment tools, the methods and procedures were incorporated into the CHMC/CHV training materials, as described in the next section. In addition, to strengthen the capacity of CHOs supporting CHMCs to utilise this tool, the method of utilisation was incorporated into the CHO/SDHT refresher training and training for trainers of the CHMC/CHV training (described in the next section), as well as into the DCHOO.

(3) Presentation of the Tools to GHS HQ for National Standardization

To standardise and disseminate the use of these tools, it is essential to incorporate them into the CHPS National Implementation Guidelines. For this purpose, the tools were explained to the Deputy Director of

the PPMED of GHS HQ during the first term of the Project. At the end of the first term, a personal change occurred that required further explanation. Although this caused delays, it was agreed at the end of the Project that the tool would be implemented in the UWR and the four Project-targeted regions. The tool will continue to be implemented in these five regions, and once its effectiveness has been confirmed, the procedures for national standardisation will proceed.

(4) Use of the Tools in CHPS Zones

According to an end-line survey, 85.5% of the CHOs interviewed in the UWR indicated that they utilised these assessment tools. The tools were also implemented in UER, NER, and SR through DCHOO. As of April 2023, they were implemented in 200, 21, and 57 CHPS zones in UWR, NER, and SR, respectively. This will be introduced into the NR in the future.

(5) Use of the Revised CHAP Format by Development Partners

The Community Engagement for Health and Well-Being (CE4HW) program of the Accelerating Social and Behaviour Change (ASBC) project of USAID currently conducts CHAP training for CHMCs. The revised CHAP format developed by the Project was adopted for use by the program and included in the program's training field guide. The CE4HW program covers all CHPS zones in 17 districts in four regions: UWR (5 districts), UER (4 districts), NR (6 districts), and NER (2 districts) of the five Project-targeted regions. This implies that the four regions will continue strengthening their capacity to promote using this format.

(6) Consideration of Issues for the Future

Although these assessment tools have been introduced in the five regions, they have not been incorporated into the CHPS National Implementation Guidelines. The tools were only introduced in CHPS zones where materials were provided, and training with these tools have been conducted. Thus, it has not been standardised. The PPMED of the GHS HQ is expected to incorporate this format into its guidelines and make it prescriptive. Moreover, creating the format specified in these guidelines will be a future task. To this end, it is necessary to demonstrate the tools' effectiveness by conducting demonstrations in the five Project regions. At the end of the Project, the RD of the five regions expressed their intention to recommend it to the Director General of the GHS because it is desirable to use the same CHAP format in all CHPS zones, and standardisation of this revised CHAP format is essential. It is also expected that the PPMED should follow up with the RD of the five target regions to make recommendations for the DG.

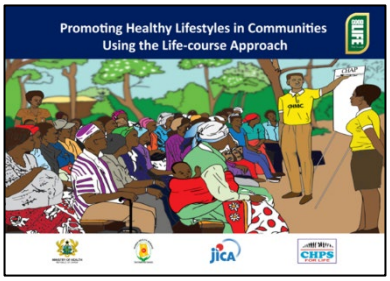
2.3.2 Development and Implementation of CHMC/CHV Training Materials

(1) Development of Training Materials

The training material was developed to train CHMC and CHVs to enhance their understanding of their roles in CHPS implementation and strengthen their capacity to implement community health activities, such as LCA, through the CHAP. Consistent with this, the flipchart material was designed to use as few words as possible but with many illustrations and questions to minimise explanations and encourage discussion among members. To develop these training materials, a community mobilisation TWG was formed in the first term, comprising the RHMT and DHMT of the UWR. The TWG discussed the content of the training program and modules based on the LCA concept in collaboration with the noncommunicable diseases (NCDs) TWG formed for Output 4 activities.

Module 1 was designed to illustrate the role of CHMC, CHVs, and CHAP implementation. Module 2 was designed to illustrate the LCA concepts and sample activities by community. The title of the training material was 'Promoting Healthy Lifestyles in Communities Using the Life-course Approach'. The materials and module contents are listed in Table 2-17.

Table 2-17: CHMC/CHV Training Material/Module

Title: Promoting Healthy Lifestyles in Communities Using the Life-course Approach			
Module 1: Community and CHAP		**Module 2: Life-course Approach to Health**	
1	Understanding CHPS	1	Understanding Life-course Approach
2	CHMC managing CHPS activities	2	Importance of interventions in the first 1000 days of life
3	CHMC supporting CHO	3	Keeping pregnant women and children healthy
4	CHVs supporting in disease prevention	4	Community actions to keep pregnant women and children healthy
5	CHVs supporting CHO to conduct home visit and outreach	5	Keeping adolescents healthy
6	Drawing and implementing CHAP	6	Community actions to keep adolescents healthy
7	Assessing and updating CHAP	7	Ensuring good nutrition
 Cover page of the material		8	Community actions to ensure good nutrition
		9	Ensuring good hygiene
		10	Community actions to ensure good hygiene
		11	Regular health screening
		12	Community actions to ensure regular health screening
		13	Smoking, alcohol intake and exercise
		14	Community actions on smoking, alcohol intake and exercise

The Social Behaviour Change Communication Technical Review Committee (SBCC TRC) of the GHS reviewed the content as part of the development process of this material. The committee met three times, with the first meeting in February 2020, and the material was officially approved in December 2020.

(2) Training of Trainers for CHO for CHMC/CHV Training

Training of trainers (TOT) sessions were conducted to enable CHOs to become CHMC/CHV training facilitators in the CHPS under their jurisdiction. This TOT was conducted in conjunction with the CHO/SDHT refresher training held as LCA training for incumbent CHOs and SDHTs (for details, see '2-5 Activities Related to Output 4' in this chapter).

This refresher training included 192 CHOs from 11 districts in the UWR. To provide training to more CHOs, the TOT of the CHMC/CHV training program for CHOs was developed. The first training session was led by the RHMT, with a total of 41 CHOs. The second training session was conducted at the district level, with the DHMT taking the lead. It was held in 11 districts from February to March 2022 (one district in June), with 341 CHOs participating. This means that the TOT of the CHMC/CHV training was provided to all current CHOs assigned to the CHPS in the UWR. Furthermore, this TOT was incorporated into the DCHOO described in Output 1, and new CHOs were given a classroom lecture and a demonstration of CHMC/CHV training in a field exercise at CHPS assisted by the current CHOs.

(3) Implementation of CHMC/CHV Training

The first CHMC/CHV training was conducted for CHOs from 33 CHPS zones from July to November 2021 with the support of the Project and the RHMT. The second and subsequent training sessions were led by the DHMT without financial support from the Project and were conducted through quarterly CHMC meetings and other opportunities. This training was widely disseminated by CHOs who attended the second TOT of CHMC/CHV training for CHOs and was implemented in 222 CHPS zones between March and the end of October 2022. This training will continue under the district's initiative, using CHMC meetings and other opportunities according to the needs of CHPS, CHMC, and CHVs. Its continuity is ensured by internalisation in the CHMC training conducted by other development partners, as described below.

(4) Development of LCA Promotion Videos

LCA promotional videos were produced to promote community awareness of LCA concepts and encourage participation in activities. The videos consisted of promotional videos (each less than one to two minutes long) covering five topics and a Ghanaian version of the radio exercise video. The videos produced are listed in Table 2-18.

Table 2-18: Titles and Contents of the LCA Promotion Video

No.	Title	Concept and contents
1	Infant Care	Breastfeeding, complementary feeding and growth monitoring
2	School aged children	Hand washing and oral care
3	Adolescent	Safe sex
4	Adult and Elderly	Early detection
5	Male Involvement	Male involvement during pregnancy

No.	Title	Concept and contents
6	Radio exercise	Family exercises to improve health

Promotional videos were filmed with the support of UWR community members. A physical education teacher from UWR supervised the Ghanaian version of the radio exercise video, and movements were arranged for easy application by the Ghanaian population. While producing these videos, the SBCC-TRC meetings discussed everything, from concept to content. Promotional videos were officially approved in February 2020, whereas the Ghanaian version of the radio exercise video was officially approved in September 2021. The video was originally planned to be televised; however, budgetary constraints made this difficult. Therefore, it was released on the Project's Facebook page in April 2022 and made available for download to encourage its use. It was distributed to CHPS zones via USB. Promotional videos were converted into audio versions produced in the three main languages of UWR: Wali, Dagaare, and Sissala. The three audio versions were broadcast on the radio.

(5) Sharing Training Materials with Development Partners

The CHMC/CHV training materials developed by the Project have been adopted and used for CHMC training by development partners such as the United Nations Development Programme (UNDP) and USAID.

The HPO of the UWR and the Project senior coordinator participated in the training conducted by UNDP in the Greater Accra Region in March 2022 as facilitators. They were introduced to CHOs and SDHT staff on the CHMC/CHV training program and training materials developed by the Project.

For USAID, the Quality Services for Health (Q4H) project has been conducting training using the CHMC/CHV training materials of the Project as official training materials for seven regions since November 2022. The training material is also expected to be used by the “Community Scorecard French 5% Initiative Grant” program implemented by PPMED, GHS HQ, and development partners such as African Leaders Malaria Alliance (ALMA) and Hope for Future Generations (HFFG) for their CHMC training.

(6) Consideration of Issues for the Future

The implementation of CHMC/CHV training was expanded to August 2022, close to the end of the Project. Training is expected to continue to be implemented in more CHPS under the leadership of DHMTs. To this end, it will be necessary to continue training for CHOs as trainers through DCHOO and to coordinate the implementation of CHMC training with programs implemented by development partners. At the regional level, it is also necessary to coordinate the effective use of these programs by development partners so that there are no biases in selecting the target district and/or CHPS.

The actors implementing the activities and training related to CHMC and CHAP are divided into two groups: the Health Promotion Division of the GHS HQ and the Health Promotion Unit at regional and district levels. The other is PPMED at the GHS HQ and CHPS units at the regional and district levels. In the Project, the Health Promotion Division developed training materials and promotional videos, while the CHAP assessment tools and CHMC training were used with PPMED. The Project should have been more aware of these lines and promoted collaboration among them.

The Project faced issues with promotional videos, including a lack of equipment, such as monitors and personal computers to play the videos, and an unstable network, which made it difficult to use videos on social networking services. However, a local-language audio version of the promotional videos was produced without the intervention of Japanese experts. This suggests that the method can be expanded to other regions.

2.3.3 Creation of NMI System

As mentioned, one of the key actors in the CHPS is community volunteers, and it is important to maintain their motivation; the challenge is to provide incentives for them to do so. Although some DHMTs have previously conducted their own NMI activities, their implementation has depended on the interests of the DDHS and erratic budget sources. The Project aimed to identify more effective and efficient NMI activities, including those that are cost-effective, and to ensure their implementation by systematising and institutionalising their introduction.

(1) Piloting Incentive Activities

The Project and its counterparts interviewed stakeholders, including RHMT, DHMTs, and CHOs, about incentive activities that have already been implemented and those they would like to introduce. After compiling the results, a meeting was held in August 2020 with the RHMT, DHMT, and DA to select eight activities to be piloted. A pilot study was conducted in all 11 districts of the UWR from September 2020 to August 2021. The DA, National Health Insurance Scheme (NHIS), and Department of Social Welfare (DSW) were involved in implementation and meetings. In the implementation process, experience-sharing meetings were held where DHMTs shared their experiences in securing budgets and ways to conduct activities while spending minimal money. One of these was the NHIS registration.

Normally, NHIS registration/renewal attracts a fee of 27 to 30 cedis (for 18–69-year-olds). This incentive allows volunteers to register for free. Initially, the DHMT and DA were expected to bear this fee; however, some districts adopted a cost-waiver method in cooperation with the DSW. After sharing this experience with each district, it was applied to other districts. The eight activities were evaluated using the following five-point scales: consistency, efficiency, effectiveness, impact, and sustainability. Based on the results, the six activities listed in Table 2-19 were finally selected in April 2023, and the RHMT of the UWR proposed

to institutionalise their implementation in their region. Through this institutionalisation, the DHMT, in principle, requires all districts to implement two of the six activities, while four would be implemented in each district according to its circumstances.

Table 2-19: Selected NMI Activities

No.	Incentive activities	District to be implemented
1	Support on enrolment onto NHIS subscription	All UWR
2	Issuing a recommendation letter for family members and relatives of volunteers to enter the Health Training School (HTS)	
3	Priority attention with ID card	According to its circumstances
4	Annual awards for CHMC	
5	Annual awards for CHVs	
6	Assistance for social events (e.g., wedding, naming ceremony and funerals of family members of volunteers)	

(2) Development of Reference Materials

To institutionalise these NMI activities, reference materials summarising the roles and functions of each stakeholder and the procedures for each activity were prepared by the regional and district CHPS coordinators and the DDHS based on the results of the pilot implementation.

(3) Institutionalization of NMI Activities in the UWR

In April 2023, an official communication letter to institutionalise the non-monetary incentive activities in the name of the RD of UWR was issued to each DHMT, DA, NHIS, DSW, and other related stakeholders in UWR.

(4) Consideration of Issues for the Future

When implementing NMI activities, it is important to secure budgets. Activities and approaches that could be implemented with a minimal budget were identified during the pilot activity. For example, a method was found for CHVs and CHMC members to register with the NHIS without incurring any costs. However, there were overhead costs associated with NHIS registration, such as the need for CHMC members, CHVs, and accompanying DHMT staff to visit the NHIS office to complete the registration process. This incurred transportation costs. To cover these overhead costs, the DHMT must actively engage and collaborate with the DA to ensure that the HIAP budget for this NMI activity is incorporated and enforced.

2.4 Activities Related to Output 3

Output 3 aims to increase the service delivery capacity of the CHPS through improved governance. In this Project, CHPS governance refers to participatory planning and monitoring by the District Assembly (DA), the DHMT, and other stakeholders to support CHPS implementation. Project interventions include

developing tools for participatory planning and monitoring, preparing a reference document (handbook) on planning and monitoring processes and procedures, and developing a HIAP to address CHPS implementation and health challenges. Plan (HIAP) and facilitate learning among target districts/regions.

This report organises and describes the activities in the PDM in the following form, together with the results and materials produced.

Table 2-20: Output 3 Activities

【**Output 3**】Governance of CHPS by local government and stakeholders is strengthened.	
Activities in the PDM	**Items to be described in this report**
3-1 Assess and score the current level of governance of CHPS by DA and stakeholders 3-2 Regional Coordinating Council (RCC), RHMT, DA, DHMT and stakeholders conduct a joint stakeholder meeting and discuss on CHPS planning (HRH, equipment, logistics), budgeting and monitoring. 3-3 DHMT and DA develop health integrated annual action plans with budgets for implementation 3-4 DHMT and DA monitor health integrated annual action plans developed in Activity 3-3. 3-5 Plan and conduct intra/inter joint learning among target districts/regions	(1) Prepare HIAP reference material (activities 3-1, 3-2, 3-3, 3-4). (2) Formulation of HIAP (Activity 3-3) (3) Monitoring of HIAP implementation (Activity 3-4) (4) Joint stakeholder meeting (RCC/DA engagement meetings) (Activities 3-1, 3-2, 3-5)

2.4.1 Preparing HIAP reference material

The HIAP was introduced in the JICA Technical Assistance 'Project for Improvement of Maternal and Neonatal Health Services Utilizing CHPS System in the Upper West Region'. It was implemented from September 2011 to September 2016. The format was developed as a tool for DAs and DHMTs to secure budgetary allocations for health activities, including CHPS implementation, and to develop joint DA and DHMT plans. The Project team decided to continue using HIAP. The Project used the HIAP as a planning and budget management tool to strengthen the health financing and public financial management capacity of DAs and DHMTs, with estimated costs. To this end, a revised version of the HIAP was prepared by adding budget items to the format. A reference document (handbook) was developed, specifying the procedures and responsibilities of the stakeholders involved developing and monitoring the HIAP. The HIAP handbook was reviewed and finalised during the 4th TWG in April 2022. The five Northern Regional Ministers endorsed and signed the final reference document and shared it with the PPMED and GHS HQ. The reference material is realistic and allows for the preparation and monitoring of HIAPs using the following procedures, even if training for HIAP implementation cannot be conducted. The GHS HQ was interested in distributing it to all regions outside the Project-targeted regions nationwide. However, securing budgets for consensus-building for implementation, printing reference documents, and conducting training as required is difficult, and a national roll-out is a future challenge for the GHS HQ.

2.4.2 Formulation of HIAPs

In addition to UWR, the intervention covered four target regions. HIAP formulation began in 2019 at UER and NR. Following the national reorganisation, the HIAP formulation was extended to the NER and SR in 2020 after the NR split in 2019. This Project supported developing and revising formats and reference materials for HIAPs in a TWG established in April 2018. The Project also shared these formats and reference materials for HIAPs at the start of HIAP development in the four target regions other than the UW, as well as experiences from the UW, to enhance their understanding of developing HIAPs. As described below, support for developing these HIAPs was provided at a joint stakeholder (RCC/DA engagement) meeting. The RCC, RHMT, DA, and DHMT develop draft HIAPs annually. After the meetings, the Project also worked with the Regional Planning Coordinating Unit (RPCU) and the District Planning Coordinating Unit (DPCU) to finalise the HIAP formulation and manage progress. The HIAPs developed by the RPCUs and DPCUs were used to support the finalisation and progress management of the HIAPs. The developed HIAP activities were categorised into six main groups: i) infrastructure, ii) support for national campaigns, iii) procurement of health equipment and materials, iv) support for health-related meetings, v) financial support and motivation for medical and health workers, and vi) support for public participation activities. The largest proportion of HIAP activities were infrastructure-related activities, such as the construction of CHPS facilities, construction of wards, and connection of electricity and water supply to CHPS facilities. The main reason for this is that infrastructure has a high community need. Another reason is that infrastructure development allows politicians to easily show results to the community, giving them an electoral advantage. The next most common areas were procuring health equipment and materials and supporting national campaigns such as immunisation. DAs support the expansion of services and activities that are national priorities.

In the HIAP formulation, the Project decided that the activities should be drawn from the DA's medium-term plan and that finalisation should be attained through collaboration between the DA and the DHMA. The process was devised to ensure consistency with existing plans and excluded complex processes, such as using multiple formats and consultations, without spending much time on the HIAP formulation. The introduction of the HIAP has facilitated communication between DAs and DHMTs and made it easier for DAs and DHMTs to collaborate to identify and prioritise issues in the health sector. This is also true at the regional level.

The five regions agreed to continue the HIAP implementation after the Project ended. The HIAP is based on the DA’s mid-term plan and is expected to continue without hindrance, given the good relationship and communication between the DA and the DHMT.

2.4.3 Monitoring of HIAP Implementation

The implementation of the formulated HIAP was monitored by the DPCUs and RPCUs with the support of the DHMT and RHMT. This monitoring system uses various formats to check the progress of activities and

their execution from a financial perspective. The Project supported the development and revision of formats and reference materials by the TWGs to guide the implementation of quarterly monitoring. The main factors hindering HIAP monitoring are the lack of commitment and interest of the DPCU and RPCU leaders. Lack of resources, including fuel costs, has also emerged as a challenge for regular monitoring. At the RCC/DA engagement meeting, it was reported that monitoring had occurred in some instances. However, paper-based monitoring reports were not submitted promptly. To address this issue, it was agreed that hard copies must be submitted as a rule, whereas soft copies should be sent in advance.

Each district conducts quarterly monitoring, such as a DHQPR meeting. The HIAP will be incorporated and implemented as part of existing quarterly monitoring.

2.4.4 Joint Stakeholder Meeting (RCC/DA Engagement Meetings)

To strengthen the public's financial management capacity for CHPS and other health activities, the Project supported the conduct of an annual regional joint stakeholder meeting assisted by RCCs, RHMTs, DAs, and DHMTs to share experiences and issues on CHPS planning, budget measures, and progress management. While meetings are held once, in principle, they have been held twice a year for most years in coordination with the RCCs and RHMTs. The main purpose of the meeting at the beginning of the year was to review the previous year's HIAP implementation. Each district presented the results of the previous year's HIAP implementation and the finalised HIAP for the current year. At the mid-year meeting, each district reported on the progress of HIAP implementation and shared the findings and lessons learned through HIAP implementation and the draft HIAP for the following year with other districts. The Project developed a standard template for DAs to present at this consultation meeting to facilitate the sharing and understanding of their progress and challenges.

The end-line survey results showed that RCC/DA engagement meetings helped understand and prioritise health issues, increased budget allocations to the HIAP, and increased stakeholders' commitment. They provided a forum for mutual learning, information exchange, and healthy competition. It also indicated that the meeting was a collaborative platform where they learned how to develop realistic plans and increase implementation rates based on a credible budget. Thus, the meetings provided an opportunity to facilitate communication between stakeholders and promote HIAP.

The Project supported the costs of organising RCC/DA engagement meetings for the Project's duration. Before the end of the Project, a joint RCC/DA engagement meeting was held with the five regions to exchange their views on HIAP sustainability. To ensure sustainability, regions will use opportunities such as the annual and quarterly review meetings held in each region after Project completion to develop, monitor, review progress, and hold discussions related to the HIAP. This is reached at the higher levels of responsibility, Regional Minister and Regional Health Director, in each region.

Consideration of Issues for the Future

As mentioned above, HIAPs have been formulated and implemented in all target districts in the five regions and all districts, including non-targets in the NER. Stakeholders such as RCC, DA, RHMTs, and DHMTs are aware of the benefits of HIAP, such as smooth communication between stakeholders and the ability to identify issues and address high-priority issues in the health sector. In addition, the higher-level leaders in each region signed a commitment agreement that described the roles and implementation items of the RCC, RHMT, DA, and DHMT regarding HIAP sustainability. Furthermore, the ministers in the five regions signed the HIAP reference document. This enabled them to formulate and implement the HIAP following this reference material even if the responsible person or persons in charge changed. These factors indicate that the continuation of HIAP in the five regions is expected.

The rollout to all regions of the country outside the Project target regions was discussed with GHS HQ during the finalisation of the HIAP reference material, and GHS HQ was keen to do so. However, national roll-out is a future challenge for the GHS HQ, as it is difficult to secure a budget for consensus-building for implementation, printing of HIAP reference material, and conducting training as required.

2.5 Activities Related to Output 4

Output 4 addresses the LCA in the CHPS minimum package. It is related to achieving Indicator 3 of the Project Purpose: 'The level of CHPS implementation with a life-course approach in UWR is increased'. Specific activities include defining the LCA concept, developing training materials, conducting training for incumbent CHOs, incorporating the developed LCA training materials into training related to CHPS implementation, and developing action plans for LCA and monitoring activities. These activities were mainly conducted in the UWR, and four other target regions were introduced into the LCA-related minimum package and shared LCA training materials. This report describes the activities of the PDM in the following form, organised by approach.

Table 2-21: Output 4 Activities

【**Output 4**】Life-course approach is addressed in the minimum package of CHPS	
Activities in the PDM	**Items to be descried in this report**
4-1 Define the concept of LCA in CHPS implementation in Ghana. 4-2 Review the current CHPS services focusing on life-course approach between the GHS HQ and northern regions. 4-3 Develop the CHO/SDHT and CHMC/CHV training materials in Upper West Region. 4-4 Build the capacity of CHO/SDHT and CHMC/CHV on the LCA in Upper West Region. 4-5 Integrate life-course approach into the trainings and currently used training materials for CHPS implementation at Upper West Region 4-6 Life-course approach team develops action plan for	(1) Definition of the concept of LCA at CHPS level in Ghana (Activity 4-1) (2) Development of LCA training materials and capacity building for CHOs (Activities 4-2, 4-3 and 4-4) (3) Incorporation and development of LCA training materials into training related to CHPS (Activities 4-5 and 4-8). (4) Monitoring activities and LCA action plan development (Activities 4-6, 4-7)

	minimum package at Upper West Region	
4-7	Life-course approach team conducts and monitors district action plan for minimum package at Upper West Region	
4-8	Share the results of the action plan among GHS HQ and northern regions	

2.5.1 Definition of the Concept of LCA at CHPS Level in Ghana

During the first term of the Project, from October 2017 to February 2019, six LCA-TWG meetings were held at the GHS HQ, comprising the Director of the Family Health Division (FHD), the Director of PPMED, the Regional Director of Health Service (RDHS), and CHPS coordinators from target regions, to discuss the CHPS-level LCA concept in Ghana. As agreed upon, the final definition of LCA was to ensure healthy lives and promote well-being for all ages by promoting quality primary healthcare services and community participation with accessible resources (human, material, and financial).[19]

The concept of LCA at the CHPS level in Ghana has two aspects: providing services that meet the needs of each age group and emphasising CHPS services during the first 1000 days of life, which will help maintain good health in adulthood. Furthermore, the targets and activities that LCA should focus on at the CHPS level were presented as shown in Figure 2-4. The consensus is that healthy lifestyles in Ghana include "water, sanitation, and hygiene (WASH); safe environment; food safety; healthy diet; physical activity; appropriate alcohol consumption; and avoiding smoking".

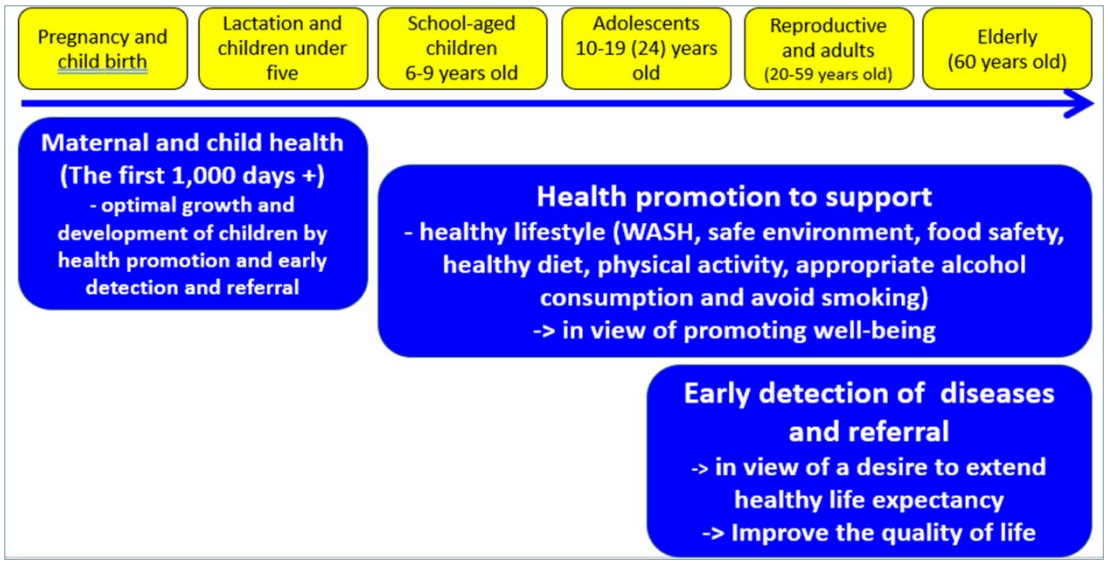


Figure 2-4: Focus of the Life-course Approach at CHPS Level in Ghana

Based on this definition, LCA training programs and materials were developed, capacity building was provided to CHOs and SDHTs, and health activities in communities were strengthened, as described in

[19] The full definition is as follows. 'Ensuring healthy lives and promoting the well-being of people of all ages.' This is done through the promotion of quality primary health care services supported by accessible resources (human, material and financial) and community participation. Several studies have shown that early intervention in the first 1,000 days of life (from conception to age 2) promotes healthy growth and development in early childhood, lowers health risks at each stage of life, maintains high life expectancy and, in turn, leads to economic benefits. Hence, a particular focus on the first 1,000 days of life'.

Output 2.

2.5.2 Development of LCA Training Materials and Capacity Building for CHOs

(1) Development of LCA Training Programmes and Materials

To develop LCA training programs and materials, the items applicable to LCA in the minimum package were identified. The programs and materials were developed based on the following points.

- First, to ensure health and nutrition services that meet the needs in each life stage, and second, to emphasise on the first 1,000 days of life because this period will help maintain good health in adulthood.
- The "Healthy Lifestyle" components were agreed upon with stakeholders, such as WASH, a safe environment, food safety, a healthy diet, physical activity, appropriate alcohol consumption, and smoking avoidance. The Project consciously placed these components in each module of the material development process.
- The questionnaire for establishing the "Healthy Lifestyle Assessment Questionnaire (HLAQ)" should be designed such that the questions about schoolchildren, adolescents, and adults are positive. Therefore, asking the questions forms a health promotion activity.
- Certain nutritional recommendations (e.g., food texture and quantities) provided by the World Health Organization (WHO) and United Nations Children's Fund (UNICEF) for age-appropriate textures for infants and 400 g/day fruit and vegetable intake for adults are difficult to understand simply by looking at words and pictures. Therefore, the module should capture and include photographs of the textures and quantities of local vegetables.

The training modules were organised according to life stage, with health issues specific to each age group incorporated into each module. Given that the module on maternal and child health includes a maternal and child health handbook, it was linked to the JICA project titled 'Improving Continuum of Care for Mothers and Children through the Introduction of the Combined Maternal and Child Health Record Book (MCHRB) Project'. Programs and teaching materials from this Project were incorporated to create synergy between the two projects. Additionally, following the coronavirus pandemic 2019 (COVID-19) in 2020, a module on countermeasures against the spread of infectious diseases was added. The structures of the training modules are listed in Table 2-22.

Table 2-22: LCA Training Modules

Module	Module Title	Unit
1	Introduction to LCA and Healthy living in Ghana	1: Trend and new realities of health situation in Ghana
		2: Understanding Life-Course Approach at CHPS level in Ghana
		3: Main components to be emphasized in Life=Course Approach in Ghana
		4: Channels for providing Life-Course Approach related Services to all age cohorts
		Summary
2	Maternal and Child Health (Essential Topics of MCH	1: Introduction of Maternal and Child Health Record Book (MCH RB)
		2: How to use MCH RB: Pregnancy care and delivery
		3: How to use MCH RB: Postnatal care (Up to 6 week)

Module	Module Title	Unit
	RB)	4: How to use MCH RB: Young children (1-60 months)
		Summary
3	Care for School-age Children	1: Importance of school health
		2: General characteristics of school-age children
		3: Establishing healthy lifestyle in school life
		4: Physical examination and follow up
		Summary
4	Adolescent Health and Development	1: Importance of adolescent health in Life-Course Approach
		2: Quality care for adolescents
		3: Adolescent friendly health services
		Summary
5	Adults and Aged Health	1: Importance of adult and the aged health
		2: General characteristics and care for adults and aged
		3: Early detection of NCDs Though health screening
		4: Health promotion and prevention of NCDs
		Summary
6	Tools for LCA Services	1: Comprehensive home visits and tools
		2: Life-Course Approach register
		Summary
7	Response to COVID-19 at CHPS level	1: Overview of COVID-19
		2: Roles and Responsibilities at each level
		3: Prevention/Precautions
		4: Case Detection/Management
		5: Special Cautions for each Age Cohort and Setting
		Summary

The development of this training material was based on the content of discussions with the Director of FHD at GHS HQ, followed by discussions with UWR LCA-TWG members. Further discussions were held with the GHS HQ, and further input was taken to re-consult and finalise the UWR LCA-TWG members. This resulted in training materials with a common understanding of the LCA for both the GHS HQ and the UWR. A manual for implementing the training was also prepared for approval by the GHS HQ as national material.

(2) CHO/SDHT Refresher Training

Based on the developed LCA training materials, CHO/SDHT refresher training was conducted to practice CHO-providing services in the CHPS, and SDHT staff supervised and mentored CHO. The training lasted four days, and four sessions were conducted between April 2019 and November 2021. This training helped strengthen the capacity of 192 CHOs and 39 SDHT staff members. The training was also attended by national CHPS coordinators, PPMED and FHD officials from the GHS HQ, and officials from the RHMT staff of the four northern regions outside the UWR. The training also allowed the review of teaching materials and programs, incorporating perspectives at the central level and from the field in other regions. This enabled the content and materials of the training to be made more relevant to the work in the field, as well as involving the relevant divisions at GHS HQ. As a result, this laid the groundwork for standardisation as national materials.

While implementing the training, the LCA register (later officially named the Health Screening Register), which records screening results for adults, was developed. Its purpose was to record LCA activities because basic health checks or screenings had not been established. From the second CHO/SDHT refresher training

onwards, the register was distributed, and practical training and instructions on using the register to record measurements, conduct assessments, and interpret the results were provided. The register was revised and finalised in the same manner as the training materials.

2.5.3 Incorporation and Deployment of LCA Training Materials into Training Related to CHPS

(1) Installation of National Approval of LCA Training Materials

As shown by the indicator for Project Purpose 3-2, it was necessary to obtain national approval for the materials to be included in the LCA-focused minimum package. Therefore, based on the LCA training materials finalised through feedback from the CHO/SDHT refresher training, discussions were held with the GHS HQ in August 2022. As a result, it was concluded that the content and concept of the materials were consistent with the national UHC policy and NCDs control measures. Moreover, there were no problems with dissemination. Thus, approval was granted to disseminate these materials nationwide, including other northern regions.

Following this approval, the theoretical aspect of the training, such as the LCA concept, introduction to the tools used in LCA, nutrition, and other curricula, was incorporated into the pre-service training materials described in Output 1. In contrast, the practical aspect, such as measuring infants, recording and analysing growth curves, providing health services in schools, and conducting adult screening, was incorporated into the DCHOO field practicum guide (Figure 2-5).

This incorporation has enabled LCA training to be delivered in existing training and strengthened LCA capacity in the CHO training process. Furthermore, given that the CHO/SDHT refresher training took four days and was costly to implement, integrating it into existing training as a strategy to ensure the continuity of training was significant.

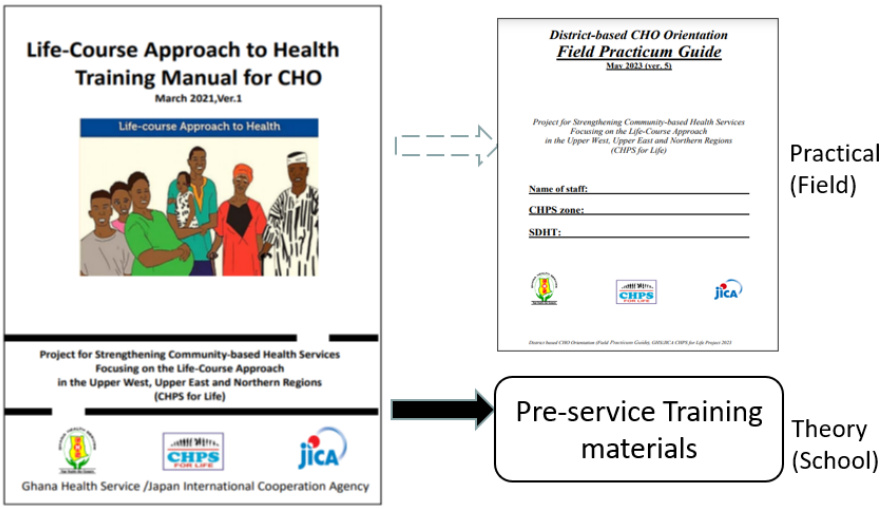


Figure 2-5: Integration of LCA into DCHOO and Pre-service Training Materials

The health screening register originally introduced to obtain PDM indicators was standardised together with training materials. However, discussions are still underway as the GHS HQ is revising and restructuring registers under its mandate. Therefore, for now, it will be used as a record form in the Wellness Clinic[20] in UWR and parts of other northern regions only. In particular, the UWR recognises the importance of the screening data obtained from the registers and intends to continue collecting, compiling, and analysing the data, sharing the results during the regional review meetings, and thereby considering linkages with further programs in the region. These data were utilised during the 2023 semi-annual performance review meetings conducted within the UWR to reduce the burden of NCDs.

(2) Implementation of District Level One-day LCA Training for CHOs

In addition to the aforementioned training, LCA training for CHO students who had not previously attended the CHO/SDHT refresher training was conducted from September to October 2022. This training was conducted at the request of the UW RHMT and at the district level to strengthen the capacity of the DHMTs to conduct LCA training. It was a one-day training program focusing on LCA services, in which further capacity building was identified as necessary based on previous training and field observations (Table 2-23). As a result, this training was conducted in all 11 UWR districts and attended by 482 CHOs.

Table 2-23: Summary of the LCA Services Presented in One-day LCA Training

Subject	Challenges
MCH	・ Record of BMI, Expected Date of Delivery in MCH book ・ Milestone of development and check on abnormality ・ Implementation of nutrition counselling and record
School health	・ Implementation rate of regular school visits ・ Recording of health education ・ Inappropriate health environment of the school
Adolescent health	・ Establishing youth corner in schools ・ Feedback to schoolteachers on the results of health check ・ Appropriate counselling technique
Adult health	・ Glucometer, strip ・ Techniques on examining blood sugar

Through this training, there was a commitment to strengthening LCA services at the regional level in the UWR. Thus, training is expected to be integrated into DCHOO in the future to further build the capacity of CHOs.

(3) Expansion of LCA Services to the Four Northern Regions

A meeting was held for the four other target regions to share their experiences of LCA training and service delivery in the UWR and strengthen LCA-related services. The meetings were attended by the RHMT and DHMT staff involved in implementing LCA services, including CHPS coordinators and nutrition officers.

[20] It is a static service centre that offers a set of basic NCDs risk screening services and targets adults and is mainly provided in hospitals and health centres.

They were held jointly in NR, NER, and SR in November 2022 and UER in March 2023.

The background on LCA and the need to strengthen LCA-related services were highlighted in these training sessions. Similarly, LCA services were implemented, and the tools developed in UWR were presented while sharing the challenges and lessons learned with the participants. The challenges and lessons learned are listed in Table 2-24.

Table 2-24: Challenges and Learning from the UWR Experience

Item	Challenges
Skills and awareness of CHO	Low level of awareness of CHOs in LCA services, difficulties in the measurement and calculation of anthropometric indices.
Equipment and logistics	Inadequate logistics, such as glucometers and strips, erratic supply of maternal–child health record books, and unaffordability of blood glucose tests
Documentation	Poor documentation and reporting
Monitoring	Poor supervision from SDHTs and DHAs of the CHPS zone. Delays in conducting follow-up visits of trained CHOs affected the quality of LCA services provided by CHOs
Assignment of responsibilities	The absence of designated staff for coordinating LCA activities at all levels affected data gathering, analysis, reporting, and usage

As the integration of action plans for LCA services into annual regional and district action plans is key to the continued promotion of LCA-related service activities, this meeting was designed to include decision-makers and staff at the working level. Simultaneously, collaboration among all the Project regions, including UWR, was also considered. Because the Project also provided four other target regions outside the UWR with data on materials for LCA training, it is expected that the training and use of the tools will increase in the future through DCHOO and other opportunities. This depends on the ownership of the respective regions. For example, in the SR, the health screening register was approved for use as a record form for the Wellness Clinic. SR intended to use the register developed by the Project as part of its exit strategy, as the Wellness Clinic is implemented with the program support of PATH, an international NGO. As in the case of the SR, linkages with other donor programs also lead to post-Project development.

(4) Consideration of Issues for the Future

The standardisation of LCA materials and tools and their future horizontal roll-out to other regions are matters for further consideration. The former, mainly concerning the health-screening register, depends on the direction of the national government and whether the GHS HQ, in particular the Public Health Division (PHD), will acquire data on borderline cases to promote preventive policies based on health-screening data or whether it will focus only on the number of patients with NCDs diseases currently being taken. Although efforts were made to involve those in charge during the Project implementation period by introducing the register and inviting them to the CHO/SDHT refresher training, there is a lack of evidence to show that the tool is effective. Moreover, the conflicting schedules of the other parties do not allow for sufficient discussion on standardisation in the country. To accelerate discussions on standardisation in the future, there

is a need for follow-up by JICA technical cooperation advisors, persistent negotiations with PPMED and PHD at GHS HQ, and collection and analysis of data from the registers used in the field in UWR and SR to demonstrate their effectiveness. This can be achieved through the continuous accumulation of records and sharing them as evidence with GHS HQ and through lobbying by UW RHD. In the UWR, it has been agreed that priority should be given to the continuous implementation and improvement of LCA services, which are included in the annual action plan of the UW RHMT. Regarding the dissemination of the latter to other regions, the effectiveness of the LCA approach and tools is supported in the four target regions other than the UWR; however, funding for the implementation of training is lacking. An agreement has been reached between the regions to introduce LCA knowledge and services during existing training in the future, such as DCHOO. Regarding GHS HQ, the Director of FHD has also promised to work with the Director General and other divisions of GHS HQ on scaling up the tools and other resources developed by the Project.

2.5.4 Monitoring Activities and LCA Action Plan Development

(1) Monitoring Activities after CHO/SDHT Refresher Training and Action Plan Development

As a follow-up activity to the CHO/SDHT training described above, the RHMT and DHMT staff monitored the CHOs who attended the training. The main objectives were to check the skills and service delivery of CHOs, the availability of equipment required for LCA services, and the utilisation of school health registers. Based on the monitoring tools developed by the Project, the records were checked, procedures such as blood glucose testing were observed, interviews were conducted with the CHOs themselves and local schoolteachers, and an inventory of the equipment was checked. These monitoring activities identified weaknesses and common challenges of CHOs, such as the inaccuracy of Body Mass Index (BMI) measurements and the lack of follow-up of patients who had undergone health screening. The Project encouraged the RHMT and DHMTs to develop and implement LCA-related action plans to improve LCA services, including strengthening the capacity of CHOs, with the RHMT and DHMT taking the lead. Consequently, these action plans will be developed until the end of 2022.

To follow up on the implementation of the LCA-related action plans developed by these DHMTs and check improvements from the first monitoring results, a second monitoring activity was conducted in the same CHPS zones in late April 2023. As part of the monitoring, guidance and advice were provided by both the RHMT and DHMTs, as well as on-the-job training for CHOs. From these monitoring visits, new challenges were identified, including inadequate reporting to senior authorities, inadequate supervision at the district level, and challenges common to the previous sessions. Therefore, a follow-up mechanism that provides field guidance for continuous CHO capacity building through supportive supervision by SDHTs and DHMTs must be developed.

The results of the second monitoring activity were shared with 885 healthcare staff members (CHOs,

SDHTs, and DHMTs) in the UWR through a feedback meeting. In addition to the need to overcome common weaknesses, such as deficits in CHO skills identified in the field, action plans for continuously improving LCA services were developed at the SDHT and DHMT levels. The SDHT level focuses on improving the quantity and quality of individual LCA services in CHPS zones. In contrast, the DHMT level focuses on district-wide approaches to improve skills and services after identifying common challenges, such as BMI calculation. The developed action plans must be sequentially monitored and sustained. Therefore, they should be included in the overall annual RHMT and DHMT action plans to ensure the continuity of activities after the Project ends.

The action plans for LCA prepared at the regional (RHMT), district (DHMT), and subdistrict (SDHT) levels will be continuously monitored after the end of the Project, led by RHMT and DHMT officials.

(2) Consideration of Issues for the Future

By monitoring activities following CHO/SDHT refresher training, the lack of skills of CHOs working in the field was highlighted, including errors in BMI calculations and insufficient follow-up of at-risk patients. To promote continuous capacity building and improvement in the future, activities must be based on action plans developed at the RHMT, DHMTs, and SDHTs levels. In the GHS system, higher authorities have supervisory responsibilities over lower authorities. Supportive supervision opportunities are expected to be used to provide continuous guidance and monitoring of LCA services and to review progress at larger meetings. It has also been agreed that LCA services will be strengthened in the UWR, the action plans developed will be incorporated into annual regional and district action plans, and the implementation of the action plans will be reviewed through semi-annual and annual review meetings. Involving stakeholders at all levels can contribute to addressing the challenges common to CHOs and strengthen their sustainable capacity.

Chapter 3: Project Objectives and Achievement of Each Output

3.1 Achievement Status of Project Objectives

As a result of implementing activities over six years, the Project has mostly achieved its purpose and outputs, as outlined in the Project Design Matrix (PDM). Achievement is defined as follows:

Achieved:	Target reached.
Mostly Achieved:	Gap to the target less than 20 points.
Not Achieved:	Gap to the target 20 points and/or more than 20 points.

The following sections describe the status of achievement of the Project Purpose and Outputs.

3.1.1 Overview of Project Purpose and Achievement Status

The purpose and indicators of the Project were as follows: the Project Purpose has largely been achieved, albeit with some challenges. Details on the status of each indicator are provided in the next section.

[Project Purpose] Community-based health services focusing on the life-course approach are strengthened.
[Indicator 1] The percentage of people who have access to functional CHPS
[Indicator 2] The level of CHPS implementation is increased.
[Indicator 3] The level of CHPS implementation with the life-course approach in Upper West Region (UWR) is increased.

3.1.2 Achievement Status of Targets for Each Indicator of Project Purpose

(1) Status of Indicator 1

Indicator 1 deals with increasing the number of functional community-based health planning and service (CHPS) zones and is identical to the overall goal and sub-indicator (2-2). For the definition of 'functional CHPS zones', see 'Box 1-1 Basic Information on CHPS Policy' (p. 1) in Chapter 1 of this report.

The level of achievement by region is summarised in Table 3-1 with the Upper West Region (UWR) and the Upper East Region (UER) mostly achieving 100% of the target. While the remaining three regions did not achieve the target, access to CHPS in the three regions has improved significantly and was well achieved given that both the Northern Region (NR) and Savannah Region (SR) are within 15% of the target. Furthermore, in NR, North East Region (NER), and SR, the baseline results at the start were considerably lower than 10%. The number of people with access to functional CHPS zones according to the data of Q1 in 2023 is 929,474 in UWR, 1,353,396 in UER, 1,076,452 in NR, 319,425 in NER, and 443,424 in SR, with a total of 4,122,171 (approximately 4.12 million). This increased by 4 times compared to that in 2017,

which was 1,105,968 (approximately 1.11 million) in 2017.

Table 3-1: Percentage of People with Access to Functional CHPS and Achievement Level[21]

Region	Target value	2017	2023	Achievement level
UWR	100%	55.2%	98.9%	Mostly achieved
UER	100%	31.1%	100%	Achieved
NR	60%	9.6%	45.6%	Not achieved
NER	75%	9.3 %***	47.5%	Not achieved
SR	80%	8%***	66.5%	Mostly achieved

Sources: Data for Q4 2017* based on the CHPS-DB for Q1 2023**
****Baseline values for NER and SR use data from Q4 2019

(2) Status of Indicator 2

Indicator 2 focuses on the increase in the CHPS implementation rates and measures the achievement of its targets from two perspectives: 2-1. Coverage of the CHPS zone with assigned staff per total population, and 2-2. Coverage of functional CHPS zones by total population. The difference between 2-1 and 2-2 is the type of health personnel assigned to the CHPS. 2-1 refers to the population covered by the CHPS that began providing services through health staff (not necessarily CHOs). As mentioned earlier, 2-2 has the same content as Indicator 1. Thus, this section discusses the status of 2-1.

Table 3-2: Percentage of People with Access to CHPS with Health Staff and Achievement Level[22]

Region	Target value	2017	2023	Achievement level
UWR	100%	60.8%	100%	Achieved
UER	100%	61.9%	100%	Achieved
NR	100%	75.7%	85.7%	Mostly achieved
NER	100%	63.3 %***	100%	Achieved
SR	100%	63.3%***	83.3%	Mostly achieved

Sources: data for Q4 2017* based on the CHP-DB for Q1 2023**
****Baseline values for NER and SR use data from Q4 2019

As shown in Table 3-2, all regions have seen an increase in the percentage of people accessing CHPS with services, with UWR, UER, and NER reaching the target of 100%, although the North Region (NR) and SR failed to reach the target. However, both the values reached approximately 15%. The number of people with access to functional CHPS zones according to the data of Q1 in 2023 is 939,760 in UWR, 1,353,396 in UER, 2,022,749 in NR, 784,314 in NER, and 555,903 in SR, with a total of 5,656,121 (approximately 5.66 million). This increased by 1.6 times compared to that in 2017, which was 3,462,244 (approximately 3.46 million) in 2017.

The following Figure 3-1 shows the comparison of the proportion of the demarcated CHPS zones, the percentage of people with access to CHPS with health staff, and the percentage of people with access to functional CHPS in the total population of the five project target regions between 2017 and 2023.

[21] Population covered by functional CHPS zones/the regional population ×100.
[22] Population covered by CHPS zones with assigned staff/ the regional population×100.

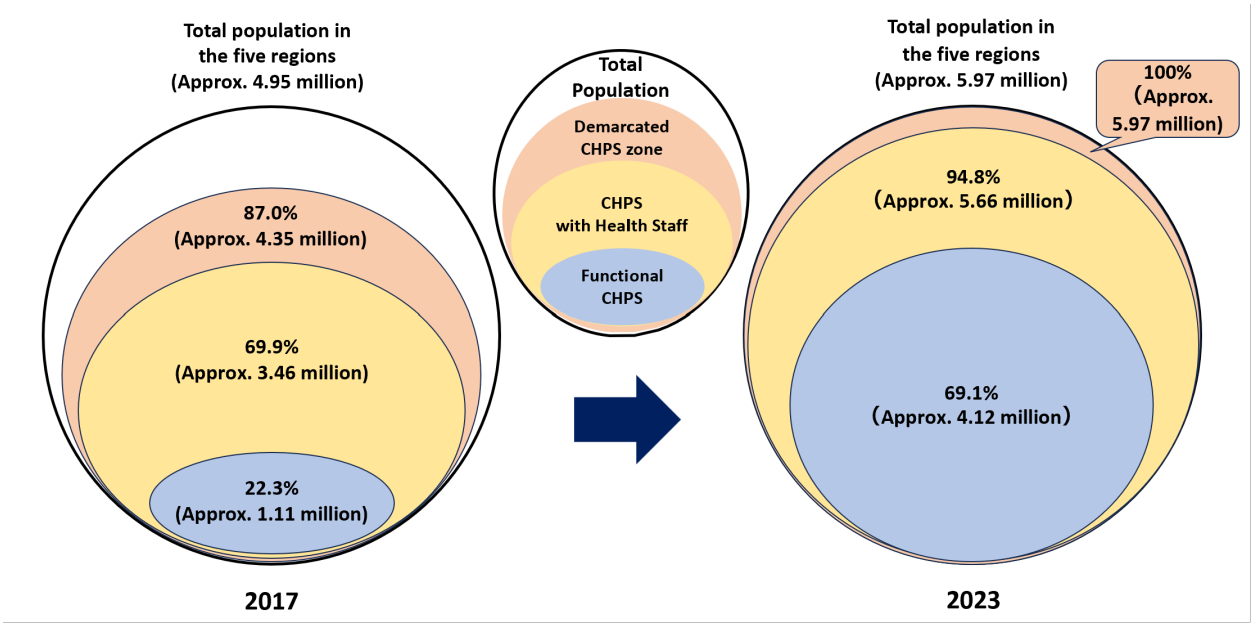


Figure 3-1: Number and percentage of people with access to CHPS in the Five Target Regions

(3) Status of Indicator 3

Indicator 3 deals with the proportion of CHPS zones implementing Life-course Approach (LCA) activities in UWR, and its achievement is measured from two perspectives: '3-1. The proportion of functional CHPS zones which provide LCA related services' and '3-2. A minimum package of services focusing on LCA was developed and proposed as a national standard'. Indicator 3-1 includes four sub-indicators: (1) the number of CHOs and Sub-District Health Teams (SDHT) staff trained on the LCA training package to provide LCA-related services has increased. (2) The percentage of CHPS zones that conduct health screening in all schools in the CHPS zone at least once a year in the last year. (3) The percentage of CHPS zones which conduct health screening in all communities at least once a year in the last year. (4) The percentage of CHOs who appropriately record the results and follow up in the LCA register (Health Screening Register) in the last year. Conversely, Indicator 3-2 focuses on the development of LCA training materials and submission to the Ghana Health Service (GHS) to be incorporated into national training materials. This includes pre-service training and district CHO orientation (DCHOO), which presents the improved and sustainable approaches for training CHOs.

Note that Indicator 3 only applies to UWR and is the same as Indicators 4-2 and 4-3 in Output 4.

Indicator 3-1 is the proportion of functional CHPS zones that provide LCA-related services and strengthen the capacity of CHOs as health-service providers.

As shown in Table 3-3 to Table 3-6, (1) the number of incumbent CHOs trained on LCA-related services was well above the indicator, whereas the number of SDHT staff did not reach the target value, although it was mostly achieved. Indicators (2) and (3) exceed 90%. (4) is based on health screening register records,

that is, the performance of LCA service provision by CHOs, despite the results of pre- and post-tests after CHO/SDHT training confirming improved levels, accurate calculation of Body Mass Index (BMI), and follow-up of patients requiring counselling and referrals did not fully meet the targets.

Table 3-3: Number of Staff Trained on the LCA Training Package to Provide LCA-Related Services and Achievement Level

Target staff	Target value	2019	2023	Achievement level
CHO	192	0	650	Achieved
SDHT	48	0	39	Mosly achieved

Source: CHO/SDHT training report, DCHOO report

Table 3-4: Percentage of CHPS Zones That Conduct Health Screening in All Schools in CHPS Zone at Least Once in the Last One Year and Achievement Level

Target	Target value	2019	2023	Achievement level
CHPS zone	40%	NA	94.7%	Achieved

Source: End-line survey report

Table 3-5: Percentage of CHPS Zones That Conduct Health Screening in All Communities at Least Once in the Last One Year and Achievement Level

Target	Target value	2019	2023	Achievement level
CHPS zone	40%	NA	94.0%	Achieved

Source: End-line survey report

Table 3-6: Percentage of CHOs Who Appropriately Record the Results and Followed Up in the LCA Register in the Last One Year and Achievement Level

Record contents	Target value	2019	2023	Achievement level
BMI calculation	100%	NA	65.9%	Not achieved
BMI categorization	100%	NA	90.9%	Mostly achieved
Blood sugar	100%	NA	80.5%	Mostly achieved
Blood pressure	100%	NA	94.4%	Mostly achieved
Waist circumference	100%	NA	93.8%	Mostly achieved
Follow up on education and counselling	100%	NA	49.8%	Not achieved
Follow up referral cases	100%	NA	57.6%	Not achieved

Source: End-line survey report

Indicator 3-2 is 'The minimum package of services focusing on the LCA is developed and proposed as national standard'. The Project developed an LCA-focused manual and PowerPoint materials and related tools organised into Modules 1-7. Discussions were also held with the Family Health Division (FHD) at the Ghana Health Service Headquarters (GHS HQ), and the target was achieved with the approval of the manual for national dissemination in August 2022. Additionally, the theoretical aspect of the LCA training materials was incorporated into the pre-service training materials following approval by the GHS HQ. The practical aspect was incorporated into the DCHOO field practicum guide.

Table 3-7: Achievements related to LCA training Materials

Indicators	Progress	Achievement level
LCA training package is developed and submitted to GHS	Approved in August 2022	Achieved
LCA training materials are integrated into pre-service training	Incorporated into the pre-service training materials and under dissemination by Ministry of Health (MOH)	Achieved
LCA training materials are integrated into district CHO orientation field guide	Incorporated into the district CHO orientations field practicum guide and used in five target regions	Achieved

Sources: training materials, minutes of discussion with GHS HQ and MOH

3.1.3 Analysis and Consideration of Achievement of Project Purpose

The Project sets three indicators that can be divided into two categories. Indicators 1 and 2 aim to expand people's access to CHPS services in the five target regions. In contrast, Indicator 3 seeks to introduce services related to the life-course approach for CHPS facilities in the UWR. Concerning the former indicators, expanding access to the CHPS services, the CHPS database (CHPS-DB) developed by the Project has enabled the regions to regularly monitor their CHPS implementation rates. With a clear strategy based on the CHPS-DB that enables each region to monitor the implementation of the CHPS regularly, the regions have been demarcating CHPS zones, constructing CHPS compounds, training CHOs, and deploying CHOs and other healthcare workers. Indicators 1 and 2 focus on staffing, the biggest challenge in expanding CHPS services, due to the activities introduced by Output 1 of the Project, especially the development of the CHPS-DB and the continuous implementation of the CHO training system; the goal was largely achieved. Conversely, the three regions, the NR, NER, and SR, did not achieve the indicators, but this was largely due to the establishing of new regions. Building new administrative structures after the creation of these regions took time. The regional management structure was unstable during the transition to the new region. In addition, these circumstances delayed the Project's interventions by two years compared to the UER and UWR.

For indicator 2-1, the fact that NR and SR could not achieve the target may be because the two regions prioritised the subdivision of the CHPS. Whilst the number of CHPS zones has increased due to continuous demarcation, they have been unable to keep up with hiring and deploying human resources to initiate services in the newly demarcated CHPS zones by GHS. In addition to the shortage of human resources, the SR has identified issues of maldistribution of facility staff. The Project encouraged these three regions to establish CHPS units quickly and supported the orientation of stakeholders and the development of CHPS data. These efforts have enabled regions to initiate the early development of data-driven CHPS implementation strategies, particularly CHO training plans. However, some indicators did not meet their targets until Project completion. Factors that may have contributed to the failure to achieve the target include: (1) the Ministry of Health has not properly hired CHNs, and (2) t The project has placed a strong emphasis on sustainability and district ownership, minimizing project support until the districts can train

and deploy Community Health Officers (CHOs). This approach has led to delays in project activities. However, since these three provinces have re-established their CHPS implementation plans and are now steadily implementing them, the Project team believe that it is only a matter of time before this target is achieved.

Indicator 3 aims to strengthen LCA services at the CHPS level and, as previously mentioned, is closely linked to Output 4. In the early days after the LCA concept was introduced in Ghana, the Project set two sub-indicators for UWR: 1) LCA-related service initiatives were strengthened and 2) a minimum package of CHPS-level health services including LCA components was developed and nationally approved. For 1) LCA-related service initiatives, LCA training materials were developed. As a pilot, training was conducted for selected CHOs and SDHT staff, including theory and practical training, four times in total. The first and second CHO/SDHT refresher training courses were conducted on a smaller scale than originally planned to pilot the development of training materials. The third and fourth training sessions were conducted at the request of their counterparts (CPs), with priority given to training and capacity building for the maximum number of CHOs working in the field rather than SDHTs. As a result, the number of SDHT staff fell short of the target but was mostly achieved. In addition to other set indicators, at the request of the UW RHMT, the Project supported implementing a one-day training program in each district for the remaining CHOs who had not received training. This enabled capacity strengthening through implementing LCA training for more than targeted CHOs. In reviewing the structure of the teaching materials and modules for each training session, improving the training quality and strengthening each facilitator's capacity were emphasised. Regarding implementing LCA services after training, the indicator was calculated regarding the percentage of CHPS zones where health screening was conducted in all schools and communities in the target area within the past year. This implies that the CHOs who received training recognised their role and that the increased knowledge and skills led to their broad practice. However, some indicators for properly recording health screening and patient follow-up, which measure the actual competence of CHOs, have not been achieved. The health screening register records results indicated inadequate BMI measurements, patient counselling, and post-referral follow-ups. This may have been due to the insufficient capacity and workload of the CHOs and a lack of knowledge and awareness of the appropriate use of resources, standard documents, and LCA data in the field. The details are presented in Output 4. The other sub-indicator set, the minimum package-related indicators, was achieved by approval for dissemination from the GHS HQ in August 2022. Afterward, the theory and practical aspects of the LCA training materials were integrated into the pre-service training materials and the DCHOO field practicum guide, respectively (see Output 1). The early involvement of the GHS HQ and the regional level in eliciting their needs may have contributed to the on-schedule integration.

3.2 Achievement Status of Output 0

3.2.1 Overview of Output 0 and Achievement Status

Output 0 of the Project and its indicators are listed below; the targets have mostly been achieved.

[Output 0] The project is monitored and evaluated periodically, and good practices and lessons learned are shared with other regions and GHS HQ for scaling-up.	
[Indicator 0-1] Joint Coordinating Committee meeting is conducted for at least once per year.	Achieved
[Indicator 0-2] The number of technical exchange events conducted during the whole project period.	Mostly achieved
Indicator 0-3] GHS HQ receives monitoring sheet (twice per fiscal) and progress reports (as determined in Record of Discussion (R/D)).	Achieved

3.2.2 Achievement Status of Indicator 0

Output 0 relates to Project management and monitoring. In addition to the JCC, the highest decision-making meeting, the Project has regularly held regional coordination meetings for the five regions and regional management meetings for working-level coordination in each region. In addition, District Health Management Team (DHMT) meetings for the District Director of Health Services (DDHS) were held to enhance Project understanding at the district level. For Indicator 0-1, nine JCCs were held over a six-year Project period. For Indicator 0-2, the technical exchanges included two monitoring tours by the GHS HQ, four study tours in the host regions organised with the JCCs, and other joint meetings and exchanges in and out of the regions and districts. The study tours in each region were originally scheduled to be conducted simultaneously with the second and subsequent JCCs. However, owing to the COVID-19 pandemic and the deterioration of security in the Project areas, fewer tours were conducted than originally planned. For Indicator 0-3, semi-annual monitoring sheets and yearly progress reports were prepared with the CPs and distributed to the relevant parties.

3.2.3 Analysis and Consideration of Achievement of Indicators for Output 0

In addition to implementing the JCCs and sharing good practices and lessons learned, which were not included in the indicators, Output 0 strengthened the relationship with the GHS and implemented activities in agreement with the regional and district levels. These contributory factors enabled the Project to advance some of its activities to national dissemination within a short time.

3.3 Achievement Status of Output 1

3.3.1 Overview of Output 1 and Achievement Status

Output 1 is primarily an intervention to expand and strengthen the CHPS implementation. Output 1 and its

indicators are as follows: The targets for indicators 1-3 and 1-4 have not been partially met, but all the other targets have been reached. In addition, several activities related to Output 1 were incorporated into existing national systems, programs, and policies, as agreed upon by the Ministry of Health (MOH) and GHS HQ. Therefore, Output 1 was better achieved than initially expected.

[Output 1] The capacity of CHOs and health management teams (SDHT, DHMT and RHMT) to plan and implement CHPS policy by national standards is strengthened.	
[Indicator 1-1] The number of trained beneficiaries is increased.	Achieved
[Indicator 1-2] Beneficiaries of district CHO orientation.	Achieved
[Indicator 1-3] Referral system is strengthened in pilot districts.	See above for the details
[Indicator 1-4] Monitoring system is strengthened in target districts.	Mostly achieved
[Indicator 1-5] CHPS database system is established at least in five regions and disseminated nationally.	Achieved

The following is a detailed description of each indicator.

3.3.2 Achievement Status of Targets for each indicator of Output 1

(1) Status of Indicator 1-1

Indicator 1-1 relates to CHO training, which is closely linked to the Project Purpose. This indicator aims to increase "the number of CHOs trained based on the national CHO training materials (harmonised CHO training)" and "the number of participants in pre-service training programs at training schools". This was introduced as a strategy to ensure the continuity of the CHO training. The latter was used to study the theoretical part of harmonised training content. Although no target value was set for this indicator, as shown in Table 3-8, many CHNs and nursing students benefitted from CHO training, indicating that the target has been fully achieved. For pre-service training, the lecture content related to the CHPS operation proposed and developed by the Project was incorporated into the training curricula for Nurse Assistant Preventive, Nurse Assistant Clinical and Midwifery schools. As a result, the Project provided orientation to the target regions and tutors in training schools nationwide.

Table 3-8: Beneficiaries of CHO Training/Pre-Service Training and Achievement Level

Region/ target	Target values	2017	2023	Achievement level
(1) Beneficiaries of the CHO training (The number of CHNs)				**Achieved**
UWR	NA	NA	166	Achieved
UER	NA	NA	90	Achieved
NR / NER / SR	NA	NA	246	Achieved
Total amount			502	
(2) Pre-service training participants				**Achieved**
Nurse Assistant Clinical students	NA	NA	1,573	Achieved
Nurse Assistant Preventive students	NA	NA	803	Achieved
Midwifery Training School students	NA	NA	1,010	Achieved

Total amount			3,386	
Tutors (The five target regions)	NA	NA	113	Achieved
Tutors (outside the five target regions)	NA	NA	125	Achieved

Sources: Project documents, pre-service training records, and reports

(2) Status of Indicator 1-2

The District CHO orientation, as described in the previous section, is a strategy developed for CHO training. The Project introduced this strategy to ensure the continuity of CHO and pre-service training. Discussion of this approach began around November 2018, during the first term of the Project, and was added as a PDM indicator at the JCC meeting held in January 2020. This indicator is measured by "The number of districts which conduct District CHO Orientation at least once" and the "Number of CHOs trained through District CHO Orientation". As shown in Table 3-9, the target of the first indicator was achieved in all five target regions, and the second was achieved in four target regions.

Table 3-9: Implementation Status of District CHO Orientation and Achievement Level

Region	Target values	2017	2023*	Achievement level
(1) The number of districts which conduct district CHO Orientation at least once				**Achieved**
UWR	11	0	11	Achieved
UER	15	0	15	Achieved
NR	16	0	16	Achieved
NER	6	0	6	Achieved
SR	7	0	7	Achieved
(2) The number of CHO trained through district CHO Orientation				**Mostly Achieved**
UWR	102	0	437	Achieved
UER	186	0	398	Achieved
NR	112	0	136	Achieved
NER	60	0	50	Mostly Achieved
SR	70	0	115	Achieved

Source: Reports from the RHMT *2023 Q2

(3) Status of Indicator 1-3

The activities of Indicator 1-3 were aimed at strengthening the referral system. The Project improved the system by enhancing the management of referral services in three target regions. Indicator 1-3 has three sub-indicators and targets: (1) the number of health facilities whose staff were trained on referral protocols, (2) the number of referrals from CHPS zones made according to the protocol and guidelines, and (3) the amount of feedback sent to CHPS zones is increased. Indicator 1 covers the former NR and all districts in the UWR and UER, whereas (2) and (3) cover the pilot districts in the current NR, UWR, and UER, focusing on one district per region.

As Table 3-10 shows, the UWR and UER mostly achieved all targets, but the NR could not achieve the targets for indicator (3). Other factors are discussed in the Analysis and Discussion section of 3.3.3 on

indicator target achievement.

Table 3-10: Achievement Level of Strengthening the Referral System

Regions (Districts)	Target values	2017	2023	Achievement level
(1) The number of health facilities whose staff were trained on referral protocols*				**Achieved**
UWR	129	0	129	Achieved
UER	355	0	355	Achieved
NR	65	0	65	Achieved
(2) The number of referrals from CHPS zones done according to the protocol/guidelines**				**Mostly Achieved**
UWR (Nadowli-Kaleo)	75%.	NA	100%.	Achieved
UER (Talensi)	75%.	NA	73.3%.	Mostly Achieved
NR (Savelugu)	75%.	NA	63.6%	Mosly Achieved
(3) The number of feedbacks sent to CHPS zones is increased				**Mostly Achieved**
UWR (Nadowli-Kaleo)	60%	NA	56.3%.	Mostly achieved
UER (Talensi)	60%	NA	60.8%.	Achieved
NR (Savelugu)	60%	NA	32.3%	Not Achieved

Sources: *Project Referral Training Records, ** Project End-line Survey Data, *** Monthly Referral Reports (DHIMS 2)

(4) Status of Indicator 1-4

Indicator 1-4 is related to actions aimed at strengthening the monitoring system. This involves the establishment of a system for continuous monitoring by the CPs of key activities under each output. Two activities concern this indicator: one activity is related to the supportive supervision promoted at the national level, and the other activity is related to the District Health Quarterly Performance Review (DHQPR) Meetings conducted at the district level. The former covers the CHPS in the pilot districts in the UWR, UER, and NR. The latter covers all 55 districts in the five target regions. The DHQPR meeting is a new activity added to the PDM to correspond to changes in Supportive Supervision (SS) activities, the purpose of which is to monitor the overall CHPS activities, including SS implementation.

Table 3-11: Achievement Level of Strengthening Monitoring Systems in Target Districts

(1) Harmonized SS training and tools for CHPS are available. In addition, the digitised SS checklist for CHPS is available, and uploaded to the national ISS platform (HNQIS)				
Achieved: Supervision training materials for CHPS integrated with the national SS programs have been developed; supervision checklists for CHPS have been digitised and added to the national SS programme platform.				
(2) The average implementation rate of SS from SDHTs to CHPS: Mostly achieved				
Regions (Districts)	**Target values**	**2017**	**2023**	**Achievement level**
UWR (Nadowli-Kaleo)	80%	NA	93.1%	Achieved
UER (Talensi)	80%	NA	95.3%	Achieved
NR (Savelugu)	75%	NA	73.0%	Mostly Achieved
NR (Nanton)	75%	NA	62.5%	Mostly Achieved
(3) The standardized reference guide for District Health Quarterly Performance Review Meeting is developed and introduced to all districts of the Project target regions.				

Achieved: Orientations on DHQPR Meetings were conducted in all districts in the five regions and reference guides were introduced and distributed.				
(4) All districts conduct District Health Quarterly Performance Review Meeting with the standardized reference guide at least twice per year over the Project period: Not achieved				
Regions (Districts)	**Target values**	**2017**	**2023***	**Achievement level**
UWR (11 districts)	100%	NA	100% (11/11 districts)	Achieved
UER (15 districts)	100%	NA	93.3% (14/15 districts)	Mostly achieved
NR (16 districts)	100%	NA	93.8% (15/16 districts)	Mostly achieved
NER (6 districts)	100%	NA	50.0% (3/6 districts)	Not achieved
SR (7 districts)	100%	NA	42.9% (3/7 districts)	Not achieved

*Percentage of districts that held at least two DHQPR meetings between Q2 2022 and Q1 2023.
Sources: Project documents and monitoring data

Table 3-11 shows the level of achievement of the targets set under Indicator 1-4. For SS, the target was mostly achieved, although some challenges remain regarding the implementation rate of SS in Nanton, in the NR. The SS checklists for CHPS supervision developed in collaboration with the national SS program were successfully approved by the national SS program, and a digitised tool was added to the national SS platform. A reference guide for the implementation of the DHQPR meetings was finalised in May 2021, and orientation was conducted for all 55 districts in the five target regions. Meetings were then initiated by the district. Since then, each district has begun to introduce this meeting, with most districts in the UER conducting DHQPR meetings every quarter, and all districts in the UW conducting meetings three times a year. In contrast, NER and the SR have not been able to meet the target of this indicator, as half of the districts failed to hold meetings twice a year, as expected.

(5) Status of Indicator 1-5

This indicator is related to the establishment of CHPS-DB and its dissemination throughout the country. This indicator was added at the second PDM revision meeting in May 2019. The CHPS-DB is a tool for organising and storing quarterly information on the status of the CHPS operational implementation, such as equipment, staffing, and CHPS segmentation information, and analysing this information to enable each region to develop appropriate CHPS implementation strategies. It is used as a source of information to measure the achievement of the Project's purpose and results.

Table 3-12: Number of Regions Where the CHPS-DB Is Disseminated and Achievement Level

Indicators	Target values	2017	2023	Achievement level
CHPS database system is established at least in five regions and disseminated nationally. The number of regions	16 regions	1 region	16 regions	Achieved

As shown in Table 3-12, the dissemination of the CHPS-DB in the five target regions was completed, and the target was achieved. For regions other than the UWR regions, it began with the initial collection of information and data storage. Subsequently, the capacity building on analytical methods through the orientation of regional and district officials and data review and feedback was conducted. The national dissemination of the CHPS-DB began in September 2021, with all activities completed by June 2023.

3.3.3 Analysis and Consideration of Achievement for Output 1

The Project team believes that the targets of the indicators for Output 1 were largely achieved, except for several indicators related to the strengthening of referrals and monitoring. Simultaneously, a number of activities and development tools addressed in this Output were incorporated into national programs and policies and disseminated at the national level. Examples include the integration of pre-service training into the national curriculum, introduction of the SS checklist for CHPS into the national SS program, incorporation of the monthly referral report into DHIMS 2, and expected addition of the referral form to the national referral policy and guidelines. These are the results of the activities that ensure the continuity of activities after the Project is completed.

Two factors can be considered to have contributed to the achievement of these targets. First, the appropriate involvement of relevant stakeholders in the Project was significant. The Project activities were conducted in the northern part of Ghana, which is geographically far from Accra, the capital city where the national ministries are located. However, from the beginning, the Project made conscious efforts to involve and collaborate with relevant departments at the GHS HQ, MOH, and Nursing and Midwifery Council of Ghana (N&MC). In the SS and referral meetings with the GHS and MOH officials, the participation of the Project's regional, district, and SDHT officials was encouraged to deepen the understanding of national officials regarding the Project activities by conveying voices from the field.

The second contributing factor was the alignment of this output activity with the strategies and requirements of the field. The results of the end-line survey conducted by the Project also showed that Output 1 activities were rated particularly highly by CPs in terms of relevance in line with national policy, effectiveness, efficiency, and impact. The CHPS-DB is an indispensable tool for the GHS to advance the CHPS strategy as it provides an opportunity for the visualisation and analysis of the human resources, facilities, equipment, and service status of CHPS facilities in regions and districts. The Pre-service and district CHO orientations provided a solution to the two challenges of the shortage of CHOs in the districts and the cost of their training. Furthermore, the Project strengthened collaboration among SDHTs and hospitals, centred on CHPS, and these were highly appreciated by the CPs, including the GHS HQ. These factors also motivated CPs in the target regions to actively promote their activities.

Some of the challenges that the Project had to deal with included the following: the creation of new regions out of the then-NR affected the implementation of activities related to SS, referrals, and DHQPRs. As new

regions were in the process of establishing their management structure, the operation was not stable and which made it difficult for the CHPS units in these new regions to carry out proper monitoring and support to the districts like how CHPS units in the UWR and UER did. With regard to referrals, the Project struggled to improve feedback in particular because the actual situation differed considerably from the Project's initial assumption that most referrals from CHPS were directed to their supervising SDHT. The reality of the field was that the majority of referrals from CHPS were sent directly to hospitals. Considerable work was needed to involve the hospital staff, including training and follow-ups. However, given the limited duration and resources of the Project, hospital interventions had to be restricted as the Project's scope was limited to CHPS facilities. Several secondary-level hospitals were concentrated in NR, including Tamale Teaching Hospital, which made activities related to referral feedback even more challenging. Under these circumstances, the Project made the best effort to visit hospitals individually, conduct orientations, and involve them in regular regional and district meetings. In addition, the challenge is observed in indicator (2), "implementation of referrals in accordance with referral procedures and guidelines," even though the Project managed to achieve the target. The Project identified frequent cases of inappropriate filing of the referral documents or lack of referral resources due to the failure to request needed referral logistics at health facilities regardless of their availability at the regional medical store. It was more often observed in the NR. A lack of awareness and understanding among the health staff is a primary factor in these situations. The CPs hence pointed out the need to strengthen their supervision of the health facility as a countermeasure through periodical facility monitoring by a referral coordinator and also implementation of SS. The CPs further shared their view on the importance of implementing orientation of the staff, both newly recruited and existing, on referral, which should be implemented regularly and continuously. MOH and GHS are currently developing a National Referral Policy and technical guidelines. In the promulgation, orientation for staff on the new policy is likely to be mandated in all regions. It is also envisaged that activities and training related to the NOPs programme will be conducted in the future. The CPs and the Project have confirmed their intention to make good use of these upcoming opportunities and continue to work on strengthening referrals.

With regard to SS, three regions, including the NR, took considerable time to understand the concept, approach, and importance of the Project, in contrast to UWR and UER, which were accustomed to the prior Japan International Cooperation Agency (JICA) project and KOICA's supervision and district quarterly meetings. As a countermeasure for these regions, the Project organised the District Health Management Team Meeting to promote understanding of the activities among regional and district-level stakeholders. However, the effectiveness of this approach remains unclear. Other factors, such as the COVID-19 pandemic and travel restrictions on Japanese experts for security reasons, also had an impact on the full follow-up of NR. Specific responses, innovations, and recommendations regarding these factors are discussed in detail in the following chapters.

3.4 Achievement Status of Output 2

3.4.1 Overview of Output 2 and Achievement Status

Output 2 pertains to strengthening CHPS community activities. The indicators for this output are closely related to the achievement of Project Purpose Indicator 1 and Indicator 2-2, 'The percentage of people who have access to functional CHPS', and indirectly to Project Indicator 3-1, 'The proportion of functional CHPS zones which provide LCA related services'.

[Output 2] Community activities of CHPS are strengthened	
[Indicator 2-1] The number of active CHMCs for community activities is increased	Achieved
[Indicator 2-2] The proportion of CHPS zones with Community Health Action Plan (CHAP) updated quarterly is increased.	Not achieved
[Indicator 2-3] The proportion of CHPS zones with CHAP updated quarterly on LCA activities is increased in UWR	Achieved

Indicator 2-1 covers the five target regions targeted by the Project, and the target was achieved in four of them. Indicator 2-2 also covers the five target regions and was not achieved in all five regions. Indicator 2-3, which cover only the UWR, are well above the target. Details of each indicator are provided below.

3.4.2 Achievement Status of Targets for each indicator of Output 2

(1) Status of Indicator 2-1

This indicator measures the number of CHMCs actively implementing community activities. The "existence of active CHMC" is one of the conditions to be considered a functional CHPS zone. DHIMS 2 and CHPS-DB define this as 'At least one CHMC meeting has been held within the past three months'. The target value for the indicator is based on the number of demarcated CHPS zones; for the UWR and UER, the target was to have active CHMCs in all (100%) of the demarcated CHPS zones. For the other three regions, the target was 60%–75% of the demarcated CHPS zones.

As shown in Table 3-13, this indicator was achieved in four regions except NER. For UWR and UER, quarterly CHMC meetings were held in all demarcated CHPS zones. This contributed to an increase in the number of functional CHPS zones, which is one of the indicators of the Project Purpose.

Table 3-13: Number of Active CHMCs for Community Activities and Achievement Level

Region	Target	2017	2023	Achievement level
UWR	496	183	496	Achieved
UER	523	147	525	Achieved
NR	322	127	349	Achieved
NER	116	NA	79	Not achieved
SR	140	NA	152	Achieved

Source: DHIMS 2/CHPS-DB, *2017 Q4, **2023 Q1

(2) Status of Indicator 2-2

This indicator implies that the proportion of CHPS zones with the Community Health Action Plan (CHAP) updated quarterly is increased. Because the 'CHPS National Implementation Guidelines September 2016' determine that community health activities are to be based on the CHAP, and it is important to continue implementation of the CHAP, the indicator focuses on regular updates.

The CHMC meeting, which is related to the aforementioned Indicator 2-1, is a forum for discussing community and CHMC activity plans and measures the level of community activity from the perspective of whether the activity plans discussed at the meeting are written in the CHAP format and whether they are updated regularly. The achievement levels for this indicator are listed in Table 3-14.

Table 3-14: Proportion of CHPS Zones with CHPS Updated Quarterly and Achievement Level

Region	Target	2017	2023	Achievement level
UWR	100%	56.7%	78.4%	Not achieved
UER	100%	36.2%	86.5%	Mostly achieved
NR	65%	19.8%	51.3%	Not achieved
NER	75%	NA	29.0%	Not achieved
SR	80%	NA	48.5%	Not achieved

Source: DHIMS 2/CHPS-DB, *2017 Q4, **2023 Q1

The percentage of CHPS zones with updated CHAPs increased since the baseline survey but did not reach the target in all five regions. In NER, the difference from the target value is significant at 46 points.

According to the regional CHPS coordinator of UWR, as shown in Indicator 2-1, community activities are discussed in CHMC meetings; however, in many cases, not all of the discussed plans were incorporated into the CHAP format, which may be a reason for the missed targets. In most cases, the CHO writes the content of the discussed plans into the CHAP format. However, it will be necessary to raise the awareness of CHOs to fill in the format properly, as well as to strengthen the CHMC's own activity management capacity.

(3) Status of Indicator 2-3

This indicator is the proportion of CHPS zones with CHAP updated quarterly on LCA activities. While Indicator 2-2 refers to the percentage of CHAP updates, this indicator further measures whether the CHAP includes LCA activities. Traditionally, most CHAPs have focused on supporting the welfare of CHOs and maintaining CHPS facilities and their compound surroundings and have not focused considerably on activities to improve community health. This indicator is significant because it measures the degree of community capacity to take the initiative in implementing community health activities. The achievement levels of the targets for this indicator are presented in Table 3-15.

Table 3-15: Proportion of CHPS Zones with CHAP Updated Quarterly on LCA Activities and Achievement Level

Region	Target	2017	2023	Achievement level
UWR	40%	0%	76.1%	Achieved

Source: DHIMS 2/CHPS-DB, *2017 Q4, **2023 Q1

The percentage at the end of the Project was 76.1%, which is well above the target of 40%.

3.4.3 Analysis and Consideration of Achievement of Output 2

The results of the end-line survey conducted by the Project showed that CHMC became more active in CHPS, where CHOs were deployed. It was shown that CHOs with a better understanding of how to promote community participation and the importance of this method helped engage the community, which in turn increased CHMC activities. In the CHMC/CHV training conducted in this Project, the facilitators were CHOs, and whether the training was implemented depended largely on their interests and abilities. In other words, both effective and hindrance factors for the achievement of the target of Output 2 are the status of CHO assignment and the interests and abilities of the CHOs assigned to the CHPS zones.

That means, the achievement of the target of Indicator 2-1, 'The number of active CHMCs for community activities is increased' can be attributed to the increase in the number of CHOs who gained a deeper understanding of the methods and importance of promoting community participation through CHO training, DCHOO, and pre-service training, and those CHOs involved the community members in the activities. Moreover, the presence of active CHMCs is a prerequisite for functional CHPS zones. Thus, a vicious cycle was created, in which the presence of active CHMCs led to evaluation by RHMT and DHMT, which further promoted their activities. For the NER that has not yet achieved the target, several demarcated CHPS zones were not served; therefore, fewer CHMCs were in place. Underlying this factor is the fact that the area covered by NER is the most remote region of the pre-division of NR, where access to CHPS zones and communities is inconvenient compared to the other four regions, making intervention more difficult.

Regarding the incorporation of LCA activities into the CHAP as Indicator 2-3, it is significant that from the first term of the Project, the capacity of CHOs in the field of LCA was strengthened through the CHO/SDHT refresher training, and LCA was also incorporated into DCHOO and pre-service training, in addition to the refresher training. Importantly, these training sessions have deepened the understanding that CHAP is also for CHMC and community-driven health activities. It has been confirmed that activities such as aged care and health screening, which have not been seen before, are being implemented in CHAP. For the other four regions of the Project, the importance of LCA has been communicated through training for CHO, and community activities are being promoted by CHOs who have attended the training. According to the end-line survey results, the level of community awareness of LCA in UWR increased from 5% at the time of the baseline survey to 90%, indicating that improved awareness among communities led to the development of CHAPs that include LCA. In other words, the indicator was achieved because of the synergistic effect

of capacity development on the part of service providers such as CHOs and approaches to beneficiaries (CHMC/CHV training, use of flipcharts, and IEC materials developed for residents).

However, one of the reasons why the percentage of CHAP updates in Indicator 2-2 increased but did not reach the target value is the lack of awareness and understanding of CHAP among CHOs and CHMCs. As mentioned earlier, discussions at CHMC meetings are not always entered into the CHAP format, and therefore, may not appear in the updated figures. In the future, further capacity development is needed so that CHMC will take the lead instead of the CHO initiative in the development of CHAP.

Another related disincentive is the delay in the start of the CHMC/CHV training; material for it was approved by the SBCC-TRC in December 2020, whereas the first training utilising this material was held in August 2021. Subsequently, it was difficult to work in communities during the COVID-19 outbreak and CHMC/CHV training did not expand widely until August 2022 or later. Because the end-line survey was conducted in October-November of the same year, the CHMC/CHV training outcomes were not yet visible at the time of the end-line survey or in the first quarter of 2023.

The reason why there is a small difference in the level of target achievement between the UWR, which was the target of the direct intervention in Output 2, and the other four regions is that, as already mentioned, the increase in CHMC activity and CHAP updates was largely due to the deployment status, interest, and capacity of CHOs and reflected the results of the CHO training that targeted all five regions rather than the interventions of Output 2.

For NER and SR, which recorded relatively low achievements for both Indicators 2-1 and 2-2, the lack of capacity-enhanced CHOs and delays in CHO placement, as indicated in Output 1, had an impact.

In light of the above, it is plausible to argue that considering the achievements, challenges, and prospects of the Project activities, Output 2 successfully developed training programs and materials for capacity development for CHMC/CHVs and eventually developed the capacity of CHOs to serve as trainers for CHMCs. However, the Project was unable to strengthen the capacity of CHMCs and CHVs entirely during the Project period because of the delay in the start of training for CHMCs and CHVs, which remains an issue to be addressed in the future. Nevertheless, it was determined that CHMC training would continue through CHOs, whose capacity was strengthened by the programs and projects of PPMED and other development partners, using the CHMC/CHV training programs and materials developed by the Project.

Furthermore, it is hoped that the institutionalisation of non-monetary incentive (NMI) activities helps maintain the implementation of activities to motivate the CHMC and CHVs. Through these approaches, it is expected that targets related to indicators 2-1, 2-2, and 2-3 will be achieved in the near future, thereby contributing to the Project's Overall Goal target indicator, 'increase in the number of functional CHPS zones'.

3.5 Achievement Status of Output 3

3.5.1 Overview of Output 3 and Achievement Status

Output 3 aims at facilitating local administrations to develop and then implement Health Integrated Annual Action Plans (HIAPs) with the support of the GHS; it is being implemented in five regions, but only in pilot districts in NR, NER and SR.

Output 3 and its indicators are as follows.

[Output 3] Governance of CHPS by local government and stakeholders is strengthened.	
[Indicator 3-1] The proportion of districts with health integrated annual action plans developed and costed is increased.	Mostly Achieved
[indicator 3-2] The proportion of districts in which Regional Planning Coordinating Unit (RPCU) and District Planning Coordinating Unit (DPCU) monitor implementation of health integrated annual action plans in 3-1 on a quarterly bases (four times a year) are increased.	See above for detail
[Indicator 3-3] The proportion of activities implemented in the health integrated annual plans is increased.	Not achieved

Under Output 3, the Project developed the HIAP formulation, monitoring forms, and reference materials, which led to the formulation of HIAPs, including budgets, in each district and facilitated monitoring. These are the effects of Project intervention, whereas in terms of implementation, the target was not reached as the DAs face challenges such as funding backlogs, which are also areas where the Project cannot intervene. The details of each indicator are provided below.

3.5.2 Achievement Status of Targets for Each Indicator of Output 3

(1) Status of indicator 3-1

This indicator shows the percentage of eligible districts in each region that developed HIAPs, which are developed by DAs in collaboration with DHMTs, reflecting the needs of the health sector and estimating the necessary costs. The HIAPs developed by DAs are also endorsed by Regional Coordinating Councils (RCCs) and Regional Health Administrations (RHAs) at the regional level.

Table 3-16 presents the achievements of this indicator. The target was mostly achieved in the five target regions, which means that the HIAP with estimated costs was developed in each district. Four regions, except SR, achieved 100% in all regions from 2019 and in SR from 2020 every year, whereas the HIAP for 2022, which was last assessed in 2023, could not reach 100%. One district in the UER developed the HIAP, but it did not have endorsement at the regional level, and the target was not accomplished.

Table 3-16: Percentage of HIAP Formulation and Achievement Level

Region (number of districts covered)	target value	2017	2023*	Achievement level
UWR (11)	100%.	0%	100%.	Achieved
UER (15)	100%.	0%	93%.	Mostly achieved
NR (3)	100%.	0%	100%.	Achieved
NER (1)	100%.	NA	100%.	Achieved
SR (1)	100%.	NA	100%.	Achieved

*: 2022 data confirmed in 2023
Sources: compiled by the Project team

(2) Status of Indicator 3-2

This indicator shows the percentage of targeted districts in each region that conducted quarterly monitoring of HIAP implementation. Monitoring is conducted by DPCUs and Regional Planning Coordinating Units (RPCUs) with the support of the RHMT. This monitoring system uses a format to check the progress of activities and execution from a financial perspective.

Table 3-17 shows the achievement status of this indicator's target. Two of the five target regions, UWR and NER, achieved this target. Although monitoring was conducted in each district, some districts did not achieve the target because, for this indicator, a district is not counted as having completed monitoring until it was conducted in all quarters. There were also contrasting results for NER and SR, where there was only one target district, and therefore either 0% or 100%.

Table 3-17: Percentage of HIAP Monitoring and Achievement Level

Region (number of districts covered)	Target value	2017	2022*	Achievement level
UWR (11)	70%	45%	91%	Achieved
UER (15)	80%	NA	67%	Mostly achieved
NR (3)	85%	NA	66%	Not achieved
NER (1)	100%	NA	100%	Achieved
SR (1)	100%	NA	0%	Not achieved

*: 2022 data confirmed in 2023
Sources: compiled by the Project team

(3) Status of Indicator 3-3

This indicator shows the percentage of activities completed out of the activities planned by the target districts in each HIAP region. HIAP activities vary from short-term campaigns to multiyear facility construction, but this indicator measures the number of completed activities regardless of the size of the activity and status of implementation at the end of the year under assessment. Therefore, activities such as facility construction are not included in this indicator even if they are implemented and progress until the year in which they are completed.

The achievement status of this indicator's targets is presented in Table 3-18 below. None of the five target regions achieved these indicators. The high proportion of infrastructure-related activities, such as the construction of CHPS compounds, construction of wards, and connection of electricity and water supply to CHPS compounds in the HIAP activities formulated might have contributed to this result.

Table 3-18: Percentage of HIAP Implementation and Achievement Level

Region (number of districts covered)	Target value	2017	2022*	Achievement level
UWR (11)	50%.	0%	38%	Not achieved
UER (15)	50%.	NA	18.6%	Not achieved
NR (3)	65%.	NA	37.5%	Not achieved
NER (1)	60%	NA	50%	Mostly achieved
SR (1)	60%	NA	0%	Not achieved

*: 2022 data confirmed in 2023
Sources: compiled by the Project team

3.5.3 Analysis and Consideration of Achievement of Output 3

HIAPs were developed in all the target districts of the five regions using regular combined budget plans. However, in UER, one of the 15 districts' plans had not yet been endorsed at the regional level, indicating that it was not achieved. The reason for non-endorsement was not a problem with the plan itself, but the procedure was not followed. Overall, the HIAP formulation was facilitated by the clarification of definitions and development of forms in the HIAP reference document and the RCC/DA meetings, which provided opportunities for the prioritisation of health needs and collaboration between health and local government actors at the district level. The RCC/DA engagement meetings, which the Project supported in organising and conducting, contributed considerably to the rate of HIAP formulation in terms of continuous review of the HIAP concept, mechanisms, and roles of stakeholders.

Quarterly monitoring of the HIAP implementation took place in UWR and NER. With UWR facilitating monitoring, HIAP was introduced at the beginning of the Project, creating an environment of understanding and commitment from higher-level leadership. NER, a new region established in December 2018, also introduced HIAP in five districts other than the one Project intervention district in 2021 under the NER initiative. Target achievement can also be attributed to a high level of interest at the operational level and a commitment of higher leadership. SR is also a new region that was established in February 2019 and introduced HIAP in 2020. Monitoring implementation is also attributed to resources such as transport costs for monitoring and the commitment of leaders, which may have been a disincentive in SR. Other disincentives related to this indicator were mentioned by DAs and others in NR, who argued that they did not have the opportunity to submit hard copies of monitoring reports in a timely manner. Therefore, it was made possible to send soft copies in advance via WhatsApp, a mobile phone messenger application commonly used locally. This enabled confirmation of implementation rather than confirmation of whether a report had been submitted and also contributed to improving the monitoring implementation rate.

RCC/DA engagement meetings also led to the promotion and improvement of monitoring based on the idea of healthy mutual competition as districts in the region shared their progress. For SR, there was continuous communication from the Project for support, and by the end of May 2023, three years after the establishment of the region and before the end of the Project, the situation is expected to improve as a result of collaboration between the RCC and RHMT and the commitment of the leaders. Regarding HIAP implementation rates, none of the five regions achieved it; HIAP implementation does not always proceed according to plan due to factors such as prioritising activities by local politicians different from local needs. It is critical to formulate realistic and implementable plans at the planning stage, particularly those based on feasible funds. Another facilitating factor is the understanding and commitment of higher-level leaders, as their understanding of HIAP and health issues influences implementation. As mentioned earlier, there was a high level of interest in HIAP at the operational level in NER, and the commitment of higher-level leaders helped them reach the near-target level. The main impediment was funding. As the District Assembly Common Fund (DACF), which flows from the national government to the DA, is often delayed in disbursement, HIAP plans funded by the Response Factor Grant (RFG) which is more secure in terms of feasible funding in the DA, are better able to guarantee implementation. It should be noted that some of the activities planned in the HIAP include the construction and renovation of CHPS facilities, which will take several years to complete. However, in the CP's view, construction and renovation were not considered implemented activities until completion because of the complexity of measuring the rate of progress. Therefore, implementation is counted as 0 (zero) in transitional years, in which construction is ongoing. This could be one reason why the implementation rate remained lower than originally assumed.

3.6 Achievement Status of Output 4

3.6.1 Overview of Output 4 and Achievement Status

Output 4 is the first intervention in Ghana to fully introduce LCA activities. The content and respective indicators for Output 4 are as follows:

Output 4 and its indicators are as follows.

[Output 4] Life-course approach is addressed in the minimum package of CHPS.	
[Indicator 4-1] The minimum package of services focusing on the LCA is developed.	Achieved
[Indicator 4-2] The life course approach is integrated into the training on CHPS services.	Achieved
[Indicator 4-3] Health service delivery focusing on the LCA is strengthened at CHPS level.	Mostly Achieved
[Indicator 4-4] The proportion of pregnant women receiving first trimester Antenatal Care (ANC), Skilled delivery, Post Natal Care (PNC) within 48 hours is increased to XX% in all regions.	See details below

Indicators 4-1 and 4-2 were achieved; however, some targets for Indicator 4-3 were not met. Indicator 4-3

depends largely on the skills of CHOs, and more time is needed to build on the underlying experience to strengthen their capacity and raise awareness. Moreover, Indicator 4-4 refers to maternal and child health and is intertwined with other activities outside the scope of the Project. In this context, the Project facilitated improvements through LCA-focused activities. In general, the Project implemented all possible activities and achieved satisfactory results in terms of the introduction and dissemination of LCA activities. The details of each indicator are provided below.

3.6.2 Achievement Status of Targets for Each Indicator of Output 4

(1) Status of Indicator 4-1

Indicator 4-1 is related to the development of training materials and manuals, including tools, as a minimum package focused on LCA in Ghana, as stated in Project Purpose 3-2. Training materials and tools for LCA were developed in accordance with the schedule of activities and approved as materials for national dissemination; thus, the indicator was achieved. Further details are provided in the Project Purpose section.

For further details, see ‘Status of Indicator 3’ (Indicator 3-2) of the Project Purpose.

(2) Status of Indicator 4-2

Indicator 4-2 refers to the integration of the LCA training materials developed by the Project into CHPS service training, as stated in Project Purpose 3-2. The theoretical part was integrated into the pre-service training materials conducted in schools, and the practical part into the DCHOO field practicum guide, thus achieving the indicator. Details are given in the Project Purpose 'Status of Indicator 3' (Indicator 3-2).

(3) Status of Indicator 4-3

Similar to Project Purpose 3-1, Indicator 4-3 refers to an activity that promotes the capacity strengthening of CHOs responsible for health services. Regarding CHO/SDHT refresher training, the number of SDHT staff members did not meet the target, but the number of CHOs significantly exceeded the target, and the target, thus, was achieved. The percentage of CHPS zones conducting health screenings in schools and communities within the CHPS zones in the past year exceeded 90%; thus, the target was achieved. In contrast, the target of recording and follow-up of LCA health screening registers, such as the accurate calculation of BMI and the follow-up rate after health check-ups or health screening, could not be met. Details are given in the Project Purpose 'Status of Indicator 3' (Indicator 3-1).

(4) Status of Indicator 4-4

Indicator 4-4 presents figures on women's post-pregnancy behaviour, that is, maternal and child health. Four northern regions other than UWR, which is the target of the intervention, are also included in the indicator. The indicator has four sub-indicators, namely (1) ' The % of pregnant women receiving first trimester ANC and the achievement level, (2) ' The % of pregnant women making at least four ANC visits

and the achievement level, (3) ' The percentage of skilled deliveries and achievement level, and (4) ' The % of women who received postnatal care from health personnel within 48 hours of delivery and the achievement level.

As shown in Table 3-19 to Table 3-22, there were variations in the achievement of the indicators across regions.

Table 3-19: Percentage of Pregnant Women Receiving First Trimester ANC and Achievement Level

Region	Target value	2017	2023	Achievement level
UWR	85.0%	62.3%	72.4%	Mostly achieved
UER	75.0%	51.1%	57.2%	Not achieved
NR	85.0%	38.9%	49.0%	Not achieved
NER	50.0%	N/A	43.2%	Mostly achieved
SR	85.0%	N/A	50.3%	Not achieved

Source: District Health Information Management System 2 (DHIMS 2)

Table 3-20: Percentage of Pregnant Women Making At least Four ANC Visits and Achievement Level

Region	Target value	2017	2023	Achievement level
UWR	90.0%	85.6%	83.2%	Mostly achieved
UER	85.0%	82.3%	78.4%	Mostly achieved
NR	80.0%	68.5%	87.4%	Achieved
NER	80.0%	NA	59.5%	Not achieved
SR	85.0%	NA	65.6%	Not achieved

Source: DHIMS 2

Table 3-21: Percentage of Skilled Delivery and Achievement Level

Region	Target value	2017	2023	Achievement level
UWR	80.0%	68.7%	68.1%	Mostly achieved
UER	60.0%	69.8%	70.4%	Achieved
NR	90.0%	64.5%	72.4%	Mostly achieved
NER	85.0%	N/A	71.9%	Mostly achieved
SR	75.0%	N/A	60.8%	Mostly achieved

Source: DHIMS 2

Table 3-22: Percentage of Women Who Received Postnatal Care from Health Personnel within 48 Hours After Delivery and Achievement Level

Region	Target value	2017	2023	Achievement level
UWR	100%	93.9%	97.0%	Mostly achieved
UER	100%	97.0%	70.4%	Not achieved
NR	95.0%	57.9%	88.9%	Mostly achieved
NER	80.0%	N/A	85.7%	Achieved
SR	85.0%	N/A	87.8%	Achieved

Source: DHIMS 2

3.6.3 Analysis and Consideration of Achievement of Output 4

The concept of LCA was defined for the first time in Ghana, and on this basis, the Project identified a

minimum package of LCA services appropriate for the CHPS zones, developed LCA training materials, conducted CHOs/SDHT training, and subsequent monitoring. Finally, national approval was obtained, and integration into the CHPS service training was achieved.

Repeated discussions with stakeholders, mainly from UWR and GHS HQ, regarding the LCA concept in the first term facilitated the subsequent development of training materials and CHO/SDHT training. Although the Project site was located in the northern region, and discussions alternated between UWR and GHS HQ, which took more time than expected, carefully selecting the opinions and needs of CPs helped foster ownership among CPs, which in turn was a vital approach from the perspective of sustainability.

The development of training materials was similarly discussed through LCA Technical Working Group (TWG) meetings, and once developed, the content and structure of the modules were reviewed after each CHO/SDHT refresher training and improved considering the cost of the training and adapting the content to the actual situation in the field. The third and fourth CHO/SDHT refresher training sessions were attended and observed by officers from the GHS HQ (PPMED, FHD), which enabled the inclusion of the necessary elements and key points for national standardisation. Moreover, other northern regions were invited to participate and provide multifaceted feedback. These training sessions led to subsequent improvements in teaching materials and tools and provided a motivational platform for dissemination beyond UWR. Discussions on the rollout to other regions were agreed upon after prior consultation with the Director of the FHD responsible for approval. This also worked to the advantage of the Project, as it served as a facilitating factor for national standardisation. The integration of LCA materials into pre-service training and DCHOO was completed, ensuring continuity and further dissemination of LCA in the future.

Regarding challenges, one that remains is the quality of services provided by CHOs after training. During the monitoring of participants in the third and fourth CHO/SDHT training sessions, there were scattered situations of insufficient implementation of LCA services in the field, resulting in some targets remaining unachieved in Indicator 4-3. This could be attributed to several factors. First, the service delivery capacity of CHOs is unlikely to develop fully in a single training session. In fact, it was not linked to adequate recording and patient follow-up coupled with the high workload of CHOs. The second is logistics, such as the lack of blood glucose testing kits and formats for recording LCA services. Third, the lack of awareness and knowledge among CHOs regarding the use or importance of LCA-related data might have affected the data quality. Finally, LCA supervision by the SDHT was inadequate; the SDHT is responsible for supporting and overseeing CHO activities. To address these issues, the Project held feedback meetings with the CHOs and the SDHT/DHMT personnel in each district involving RHMT to share issues and ensure their commitment, focusing on items where performance was below expectations. Through this meeting, participants from SDHT and DHMT developed clear action plans to strengthen the CHOs' skills and improve the quality of services. Sharing challenges and searching for solutions across the board will help improve future situations. Regarding the lack of supervision from the upper level, as discussed in Output 1,

it is recommended that checklists for assessing the performance of LCA services are included during supportive supervision for CHPS to enrich the content, and that on-the-job training is provided during visits to CHOs. This would contribute to the continuous strengthening of CHO capacities. With regard to the shortage of logistics, there is a need to ensure sufficient kits for blood glucose testing, mainly at the district and sub-district levels. To overcome the situation in which the cost of testing is high for community people and is a barrier to payment, it is also necessary to promote the risk of non-communicable diseases (NCDs), such as diabetes, to be covered by the national health insurance scheme. Awareness of these issues had already been shared with GHS HQ.

Regarding Indicators 4-4 related to maternal and child health, regional annual review meetings should continue to monitor improvements. The lack of awareness of pregnant women and their relatives about receiving health services, lack of midwives, and lack of care during adolescence, such as proper education, are considered some of the hindering factors. To improve this, it is recommended to educate mothers and their families during ANC and PNC, strengthen adolescent health education in schools, and increase the number of midwives in the CHPS.

Finally, issues related to the health screening registers developed by the Project are addressed. The use of this register facilitates regular health management of the population, enabling them to address risks and detect NCDs at an early stage. However, there is limited linkage with the Wellness Clinic promoted by the GHS HQ. As previously mentioned, the Project so far shared the health-screening register with the Public Health Division (PHD), the division in charge of the GHS HQ, for the register developed for the collection of PDM indicator data. It was suggested that it could be considered as a standard form for the Wellness Clinic; however, this was not fully discussed. It is possible that national discussions will be held on the need to obtain data on the at-risk population, that is, borderline cases, in addition to the NCDs data as patients. To this end, it would be useful to compile and share screening data collected through ongoing LCA services in UWR and SR with the GHS HQ to facilitate future national action. Introducing and implementing health screening at the CHPS level can provide useful evidence for policy formulation. Positive feedback was received from the regional (RHMT) and district (DHMT) levels, including reports of changes in the awareness and behaviour of community members to use health facilities for prevention in addition to treatment, improved screening capacity and quality of patient services by CHOs, and reporting to higher levels for further screening.

3.7 Evaluation of the Project activities by Counterparts

3.7.1 Summary of the Evaluation of the Project activities

The Project requested the CPs to evaluate the project activities through the end-line survey conducted in 2022. For that purpose, the Project used the Organization for Economic Co-operation and Development

(OECD) - Development Assistance Committee (DAC) evaluation criteria[23] . In total, 28 key CPs from Regional Health Management Team (RHMT) and District Health Management Team (DHMT) of five Project target regions evaluated 14 key project interventions based on those criteria. The questions utilized for each criterion are shown in Table 3-23 and they have been rated between 1 (least rating) and 5 (best rating). Table 3-24 presents the whole score of the DAC evaluation.

Table 3-23: Evaluation Criteria and Question

Evaluation criteria	Questions
Relevance	To what extent does the following activities meet your needs?
Coherence	To what extent do these activities align with national standards?
Effectiveness	To what extent do these activities contribute to the achievement project objectives?
Efficiency	To what extent has these activities been implemented according to plan?
Impact	To what extent has these activities contributed to improved CHPS implementation?
Sustainability	To what extent has these activities been institutionalized?

Table 3-24: The Evaluation Score of the Project Activities

	Output	Project Activity	Relevance	Coherence	Effectiveness	Efficiency	Impact	Sustainability
1	Output 1	Harmonized CHO training	**3.79***	3.57	**3.75***	3.21	3.29	3.25
2	Output 1	CHPS database and its dissemination	3.64	3.18	**3.71***	**3.46***	**3.46***	**3.54***
3	Output 1	District CHO orientation	**3.79***	3.43	3.68	**3.43***	**3.39***	**3.43***
4	Output 1	Pre-service training	3.32	3.21	3.54	**3.43***	**3.32***	**3.32***
5	Output 1	Referral related intervention (training, development of format etc.)	3.61	3.50	3.43	3.14	2.93	3.25
6	Output 1	SS related intervention (training, monitoring etc.)	**3.82***	**3.64***	**3.75***	3.25	3.29	3.29
7	Output 1	District health quarterly performance review (DHQPR) meeting	3.68	**3.71***	3.50	2.96	3.14	3.04
8	Output 2	CHO/SDHT refresher training on community mobilization	3.58	3.25	3.50	3.17	3.08	3.17
9	Output 2	CHMC/CHV training on CHAP and LCA	3.50	3.00	3.42	3.00	3.08	3.17
10	Output 2	LCA promotion through video clips	3.50	3.00	3.42	3.00	3.08	3.17
11	Output 2	Non-monetary incentive-related intervention	3.75	3.00	3.42	2.92	2.92	3.00
12	Output 3	HIAP intervention to RCC (RCC Meeting)	3.36	3.14	2.86	2.82	2.64	2.86
13	Output 3	HIAP intervention to DA	2.86	3.14	2.93	2.79	2.50	2.89
14	Output 4	Inclusion of LCA services into basic CHPS service package	3.42	**3.67***	3.50	3.25	3.00	3.25

*It is rated as top 3.

3.7.2 Summary of the Results of the Evaluation

(1) Evaluation of the Activities under Output 1

Concerning the CHPS database and its dissemination, the average score for most of the criteria marked quite high. The CPs shared their comments that the CHPS database improved their decision-making, contributed to bridging the gap in the services, and standardizing of the CHPS implementation. Concerning the activities related to the CHO training approaches, both harmonized CHO training and DCHOO had very high scores for relevance. The DCHOO marked a higher score for sustainability, impact, and efficiency. The DCHOO is evaluated as a more sustainable and efficient option compared to the harmonized CHO

[23] OECD-DAC evaluation criteria: i) Relevance, ii) Coherence, iii) Effectiveness, iv) Efficiency, v) Impact, and vi) Sustainability

training, because of its lower cost and easier logistic arrangement. Concerning the Pre-service training, relevance, coherence, and effectiveness criteria were lower than the other two training. Some indicated that there is still a requirement to re-train them again at their deployment due to the time gap between graduation and deployment.

As with the referral intervention, the rating for relevance, coherence, and effectiveness was quite high, while the rating for impact and efficiency was low. Some respondents stated the ambulance system should be strengthened, and the cost to refer clients should be considered to improve the function of referral. Concerning the SS intervention, the scoring was quite positive for relevance and effectiveness, while sustainability and impact are lower. GHS HQ is promoting SS as a national strategy to strengthen the clinical services of health facilities, but many facilities have challenges of finding the fund to conduct SS monitoring. In terms of the DHQPR, the rating for coherence and relevance and effectiveness were relatively high, while the scores for impact, sustainability, and efficiency were low. DHQPR can be a backup system of monitoring visits as an opportunity to share information and to solve the challenges throughout all GHS levels under districts and other stakeholders. On the other hand, many respondents emphasized the financial constraints to conduct the DHQPR.

(2) Evaluation of the Activities under Output 2

The scoring for CHO/SDHT refresher training on community mobilization, CHMC/CHV training on CHAP and LCA, and LCA promotion by video clip was relatively high for relevance and effectiveness, while coherence, efficiency, impact, and sustainability were in a low score comparing to those ones. Facilitating communities to improve their health status by communities themselves, which is a key strategy of CHPS implementation. However, the system to ensure the sustainability and effective method of capacity development of community which enable to cover a mass number of communities are yet developed. As with Non-monetary Incentives (NMI), it shows a high rating for relevance and effectiveness, while the other four ratings were quite low. In order to motivate CHVs to support CHPS implementation, the intervention of the Project was the identification of several non-monetary incentives which can be applied in the other communities. However, the system to ensure sustainability is yet developed.

(3) Evaluation of the Activities under Output 3

The relevance of the HIAP intervention to RCC and DA is quite high, and DA and RCC are expected to provide resources to CHPS for quality services. Meanwhile, the respondents mentioned the lack of commitment from the RCC and DA and the lack of follow-up from the RCC on the HIAP activities, and the lack of collaboration between DA and DHMT, which are the reasons for the low rating of HIAP activities.

(4) Evaluation of the Activities under Output 4

For integration of LCA services into basic CHPS services, it had generally good scores. GHS needed to strengthen LCA-related services and training materials for health staff to respond to the drastic structural change of diseases. The Project timely responded to their needs. CHOs' knowledge was improved through the CHO/SDHT refresher training on LCA. However, the monitoring after the training identifies poor skills and inappropriate practices. The sustainability of CHO/SDHT training on LCA was ensured by integrating CHO training materials.

3.7.3 Suggestions by Counterparts

- CHPS database: Orientation for newly assigned district CHPS focal person should be conducted by region to ensure the accuracy of data. To promote effective use of CHPS data, data should be shared with DA and development partners for resource acquisition.
- CHO training approaches: CHO training approaches can be selected flexibly such as a combination of HCT only, DCHOO only, HCT and DCHOO, and Pre-service training and DCHOO. DCHOO can be conducted according to the availability of resource and needs. In consideration of lack of CHN, GHS HQ need to consider allowing enrolled nurses and midwives to be CHO once they are trained through above mentioned training.
- Referral: Low referral feedback rate is a challenge in many countries. Visualization of the feedback rate improves the situation. CHO needs to be trained on the follow up of feedback case and role of CHPS as follow up facilities should be emphasized.
- Community capacity strengthening: a more sustainable way to strengthen community capacity is through capacity-strengthened CHOs rather than direct interventions. The solution is to provide sustainable, good-quality CHO training. In addition, GHS HQ should make the introduction of some non-monetary incentive activities mandatory.
- HIAP: GHS HQ should make HIAP approaches mandatory by including as an agenda of annual review meeting. Good communication between DHMT and DA is crucial. DHMT should invite DA for the review meeting to share the health-related information.
- LCA activities: Wellness Clinic should be promoted to prevent NCDs and to improve the skills of CHOs. Quality health screening record is needed as it gives insight on the coming disease structural change. Data should be collected in district base and regional level. Monitoring of CHO's skill is crucial for quality LCA related services. District should consider how to continue monitoring.

Chapter 4: Challenges, Innovations, and Lessons Learned in Project Implementation and Management

This section describes the challenges faced during the Project period and the innovations used to overcome them. The Project involved several innovations and responses to address the challenges faced during implementation and operation. Many lessons were learned from these experiences, which may benefit the GHS and JICA. This chapter describes these challenges, innovations, and responses, as well as lessons learned that can be used as a reference for future project implementation from both implementation and operational perspectives.

4.1 Issues, Innovations, and Lessons Learned regarding Project Implementation

The main lesson learned from the overall implementation system is the use of experienced national staff members.

The Project used local personnel with knowledge and experience in JICA projects and the GHS system to ensure effective implementation. Therefore, although the Project activities were implemented in the northern part of the country, far from Accra, the capital, the Project was able to communicate effectively with and involve central stakeholders. The Project was also able to propose activities in line with GHS protocols and procedures that suited the existing system. The Project also considered the importance of strengthening staff capacity and, as a result, supported staff in developing their preferred skills through regular interviews. Building the capacity of the Project staff enabled field activities to proceed smoothly, as the staff worked energetically with Counterparts (CPs) on behalf of Japanese experts, even when the Japanese experts could only provide operational support from a distance owing to COVID-19 and security concerns. The Project also contributed to the overall JICA programme, as the staff employed by the Project are now employed in other JICA projects. The utilisation of national staff, together with the strengthening of their capacities, is considered a critical factor in the success of the Project.

For each result of the Project, activities based on the issues and ideas were already described in Chapter 2, and an overview is presented in this section.

Table 4-1: Main Issues, Innovations, and Lessons Learned for Each Output

Issues	Countermeasures and lessons learned
Output 0: Management	
The division of Northern Region (NR) into three regions made it difficult to obtain continuous data. Moreover, it took time to establish a management structure in the newly established regions, which caused delays in Project activities. The above-mentioned delays were the reason for causing the result which has not	By bringing together all of the pre-split regions (NR, NER, SR) rather than individually and holding a joint meeting in NR, the delay in the development of the operational management system was covered. Moreover, consideration was given to strengthening cooperation and information sharing among the three new regions, so that activities could be carried out simultaneously in all three regions. As it takes time to develop the management system, including

achieved indicators in the three regions concerned (NR, North East Region (NER) and Savannah Region (SR)).	the employment of human resources, when a new region is created, a strategy for activities in anticipation of this is necessary.
Output 1: CHPS enhancements	
There were many input errors in the CHPS database (CHPS-DB). Thus, the quality and reliability were unsatisfactory.	CPs learned how to use the collected data and became more aware of the importance of data quality. The Project shared examples of input errors with CPs to prevent the commission of same or similar mistakes.,
It was necessary to coordinate between support for the supervision to GHA HQ by other development partners and similar activities conducted by the Project.	Several opportunities were provided for the Project CPs to exchange opinions with members of the GHS HQ and Central SS Technical Working Group, who are working with other development partners, or to directly convey the voices of the field.
To promote referral activities, it was necessary to involve not only the CPs but also hospital staff involved in the referral process because they receive referred patients.	By including hospital personnel in committees and meetings related to referrals, the Project promoted activities and created opportunities for sharing the status of referrals in the field, and measures to improve referral feedback from hospitals to lower health facilities, including CHPS.
The GHS was unable to recruit and deploy adequate health workers to all the demarcated CHPS, especially Community Health Nurses (CHNs).	The CHPS-DB was used to clarify the status of staffing in CHPS zones, and used it as an explanatory material for the region to secure staffing and appropriate staffing in districts.
Output 2: Community enhancements	
The GHS was unable to recruit and deploy adequate health workers to all the demarcated CHPS, especially the CHN.	The CHPS-DB was used to demonstrate the status of staffing in CHPS zones, and, thus, used it as the basis for the region to secure requisite staffing both for the region and districts.
Television promotions and the printing of teaching materials such as flip charts are expensive. With the Project having budget limitations, it became difficult for CPs to continue in this direction.	Since there are many residents who listen to radio broadcasts in the Northern Province, radio broadcasts were conducted using audios that had already been developed. Moreover, instead of hard copies, soft copies of the teaching materials were distributed for CPs with the view to printing hard copies whenever the required budget was secured.
Output 3: Governance enhancements	
Although there is a format for Health Integrated Annual Action Plan (HIAP) formulation and monitoring, there was a possibility that there may be differences in the understanding of the process.	A reference material (handbook) was developed to clarify HIAP formulation and monitoring formats, the use of the reference material, and the responsibilities of the people involved, in order to achieve a common understanding. The Project also obtained signatures of all five regional ministers, signifying official approval for the continuous use of the material in the regions.
It was necessary to promote understanding of the presentations in the Regional Coordinating Council (RCC)/District Assembly (DA) engagement meeting in order for the participants to exchange ideas based on a common understanding of the HIAP and progress of each district.	A standard presentation template for DA was developed so that DAs could mutually confirm the same content. In addition, by including good practices and lessons learned in the template, it provided guidance and direction in the presentations and promoted mutual learning by ensuring each district makes use of the good practices and lessons learned.
Output 4: Introduction of the life course approach	
A health screening register was developed for early detection of diseases and abnormalities, but its design failed to make provision for recording information on the second and subsequent visits and examinations.	The Project developed a record card to allow easy retrieval which is continuously been discussed with CPs. In the future, it is desirable to develop a system that can appropriately track specific risk patients. If possible, it is preferable to connect such a system to a data server such as DHIMS 2 maintained by the government and access it on a digital basis.
Blood glucose testing services were provided for a fee to community residents, which fee proved difficult for community members to bear. The fee charged was used	The Project promoted the implementation of Life-course Approach (LCA) services, including blood glucose testing, at CHPS level following training. Given that available data on blood glucose is significantly less compared to BMI and

to procure consumables needed by community health workers to conduct the blood sugar tests. As a result, many community residents were unable to access this service, resulting in limited access to blood glucose testing services and poorly documented results. Other health screening services, such as Body Mass Index (BMI) and waist circumference measurements, are provided free of charge.	abdominal circumference measurements, and the cost element, the Project proposed that the cost of blood glucose testing should be included in the National Health Insurance Scheme (NHIS) benefit package to GHS HQ. If it becomes possible to conduct blood glucose testing at the community level at no fee, it will lead to early detection of patients at risk of diabetes, and promote referrals to upper institutions, thereby reducing the risk of non-communicable diseases (NCDs).
Prior to the Project intervention, there was no set format for health screening and no appropriate screening or data management. Moreover, there was insufficient appropriate referral and follow-up of at-risk patients.	The Project developed a health screening register that reflected the needs and opinions of CPs at the regional and district levels. The register was finalised after multiple rounds of reflection and discussions. There was consensus on the need to include blood pressure, BMI, abdominal circumference, blood sugar and healthy lifestyle assessment as items required for assessments. As a target of UWR, the register was used to collect screening data on community residents, with the evidence helping to identify the at-risk patient population. Its effectiveness also attracted interest from four other regions. Positive effects are beginning to emerge from this practice according to regional and district health department officials. For instance, it is reported that community residents now use health facilities not only for treatment but also for disease risk prevention, while at the same time improving the understanding of health workers on basic NCDs measures, such as BMI measurement. This has led to a direct strengthening of CHPS functions.
Training at Sub-District Health Teams (SDHT) and CHPS level was not in the scope of the JICA project (Improving Continuum of Care for Mothers and Children through the Introduction of Combined Maternal and Child Health Record Book), which ran until January 2022. Although it was highly significant to include it in the Community Health Officer (CHO)/SDHT refresher training of the Project, the inclusion of the training required careful consideration because it was structured by life stage and so forth.	Rather than incorporating the MCH project training package as it was, it was integrated into the corresponding life stage categories (pregnancy, lactation and infancy) based on the content of the training modules developed by the Project. Additionally, the Maternal and Child Health module content was reviewed by involving the Chief Advisor of MCH project in the discussion process. This led to the development of cooperative linkages between JICA's two technical cooperation projects in Ghana and the emergence of synergies.
Following the development of the LCA training package, training was expected to be conducted only in UWR and the effectiveness of the training assessed subsequently. However, as the other four target regions also showed high interest in the LCA service and requested training, it became necessary to consider implementing it in those regions.	Owing to the limited time and budget of the Project, it was not realistic to implement training in the other four regions. Therefore, the Project supported in organizing meetings that provided an avenue for UWR to provide support and also share information and experiences with these regions. The information sharing and collaboration among the five regions of the Project was aimed at supporting the four regions to develop and implement LCA services.

4.2 Operational Structure

4.2.1 Logistics

There are three logistics aspects of the Project: i) the Project covers the five target regions and the capital, and it takes a considerable amount of time to travel between the regions and to the capital owing to the geographical spread of Project locations; ii) it is time-consuming to coordinate the schedule of the CPs in the five regions and the GHS HQ for meetings and training sessions due to geographical conditions; and iii) activities were conducted under restrictions on Project activities and movement due to the deteriorating security situation in the northern regions and the impact of COVID-19.

In the above situation, there were issues in the following areas:

i) Human resource management, including work and schedule management of the office and local staff

ii) Procurement, including payment and procurement of equipment

iii) Scheduling with the CPs

The Project devised methods to deal with these challenges to facilitate smooth operation. The challenges and countermeasures taken by the Project are summarised in Table 4-2.

Table 4-2: Challenges and Countermeasures Related to Logistic Operations

Challenges	Countermeasures
(1) Management of the local offices and staff	
In the first half of the first term of the Project, Project offices were set up in the three regions, UWR, NR and Upper East Region (UER). However, in particular, for the NR and UWR offices, it took time to secure the space required for the offices and to train local staff to take charge of logistics operations. Furthermore, the Project encountered difficulties in relation to managing accounting work and coordinating the organisation of receipts in the three offices in terms of time management because the Project offices were spread geographically.	Local staff at NR and UER offices received training from their UWR staff who were already trained in the absence of Japanese experts in order that these Project offices can be run efficiently. Regarding accounting work, the Project shared concrete schedules with each office in advance on a monthly basis, and meetings were held when necessary. Additionally, schedule management through reminder was thoroughly implemented to ensure smooth logistic work.
(2) Scheduling	
In the first term of the Project, the CPs handled numerous tasks, creating a situation where the Project found it difficult to coordinate the schedules, particularly given that schedules had to be changed at the last minute. The reschedules at the last minute were particularly burdensome for the Project because logistics operations had to be managed remotely especially for the meetings and trainings in the capital. In the second term of the Project, restrictions on Project activities and travels owing to the outbreak of COVID-19 delayed the overall schedule of the Project by about a year. Although the Japanese experts were allowed to enter Ghana from June 2021, the first time after the outbreak of COVID-19, restrictions on entering the five target regions were officially announced by JICA owing to security	As a mechanism for ensuring stable Project management, timetables were shared with the CPs in advance, and the Project coordinated the schedules through regular meetings with the CHPS unit in each region. For the second-term activities, Japanese experts continuously handled the situation through weekly meetings with the local staff and also monitoring their weekly reports as a way of tracking progress and issues related to activity implementation. Additionally, the Project instructed local staff to coordinate individual activities thoroughly to avoid last-minute schedule changes because the travels of Japanese experts to the five target regions required prior approval from JICA headquarters.

issues. However, there were no major delays due to the restrictions, as the local staff were mainly responsible for wide-ranging Project activities on-site.	
(3) Management of Payment	
Payments for participants' transport fees per diem, and accommodation fees are based on the cost norms set by JICA Ghana Office. In the first term, there was a case where the Project made payments after a training was conducted. That was because there were no cost norms established for new routes, coupled with the fact that the cost norms were yet to be finalised by the time of training. As far as the payment method is concerned, there was a risk of owing large amounts of cash required for the payment of per diem, accommodation fees, and travel expenses to facilitators and observers especially during large trainings.	As a solution to cases where new routes were involved, the Project ensured that the approval process was completed before the training was implemented. This was done by requesting the local admin staff to present the new routes in advance to make sure that there were delays in payment. In handling large sums of money, risks were minimized by withdrawing cash on the day of payment or keeping it in a safety box at each Project office to avoid having large sums of it on-hand for a long time. Cash management in the absence of the Japanese experts was handled by the local staff. The local administrative staff presented the cost estimation to the Project Coordinators. After the coordinators' confirmation, internal bank transfers from the main account to the sub-account were performed.
(4) Purchase of Equipment	
Throughout the Project duration, equipment and goods necessary for the establishment of the three offices (in UWR, NR and UER, such as air-conditioners and safety boxes) were procured. Toners for both the copiers and the printers that were provided by the JICA Ghana Office were not available in the Project area; thus, the Project needed to procure them from Accra. Additionally, a common challenge in both terms was that some printers and photocopier parts were not available in local markets or had to be ordered from Accra. The Project outsourced the printing jobs while repairing broken components. Therefore, the accumulated printing cost affected fund management of the Project.	The Project negotiated with one of the computer shops in UWR and arranged for the procurement of toners for both the copier and the printer. In the later of the first term, this part became available in UWR. This situation relieved the administrative staff of the burden of handling remote procurement. Regarding the parts which were not available in the local markets, the Project always tried adopting the most economical option. This was accomplished by having several engineers present repair options and cost estimates.
(5) Selection of Venue	
Meetings were held in the capital city of Accra when the GHS HQ was required to be involved. However, officials from the GHS HQ were interrupted or had to leave meetings in some instances as they were called away or had to take care of other tasks.	An option would be to hold meetings and/or training sessions at a location away from Accra to promote intensive participation. Depending on the overall balance and the level of the importance of the target audience's involvement, holding meetings outside the capital city may be an effective countermeasure, given the expenses incurred, such as daily allowances and transportation costs.

4.2.2 Safety Management

There were issues related to COVID-19 and the deteriorating security situation. Table 4-3 shows the issues and countermeasures taken to address them.

Table 4-3: Challenges and Countermeasures Related to Safety Management

Challenges	Countermeasures
(1) Preventive Measures against COVID-19	
To ensure the safety of participants in conducting meetings and training sessions during the	A checklist of preventive measures against COVID-19 was developed and named the 'Guideline on COVID-19

COVID-19 pandemic, the Project was required to develop a plan for infection prevention.	prevention in Project activities'. It included daily temperature checks before entering the activity venue and entry restrictions for those who with fever or other symptoms of COVID-19. While measures for the COVID-19 (such as mask-wearing) were relaxed from March 2022, the Project continued to encourage stakeholders to check their body temperature and health conditions mainly when conducting collective activities such as meetings and training sessions, in compliance with the JICA Ghana Office's policy. Moreover, workplace rules and procedures related to COVID-19 were developed for local staff, and shared to ensure that local staff are aware of infection prevention and post-infection measures, as well as how to manage their health condition and what to do in case of illness.
(2) Measures against Security Concerns	
In addition to the security regulations restricting Japanese experts and local staff from entering areas within 10 km of the nearest border between Ghana and Burkina Faso as notified by the JICA Ghana Office in December 2019, a new regulation restricting Japanese experts from entering the five target regions was officially announced by JICA in June 2021 in accordance with the deteriorating security situation in these regions. Accordingly, the Project was forced to change activity venues to Accra and other regions such as Techiman rather than the usual northern regions. Although the regulations were partially lifted, the security measures taken by the JICA Ghana Office became more stringent, requiring the Project to obtain official approval from the JICA HQ to enter these regions for specific reasons. Towards the end of the project period, Japanese experts were unable to enter UER. The frequency of UWR visits was also limited. Furthermore, entry to the NR, NER, and SR required the fulfilment of certain conditions.	Owing to the security conditions, a number of activities were implemented by the local staff under the instruction of Japanese experts. In addition to planning Project activities with alternative plans for dates and locations in mind, the time spent in the northern regions was used to identify specific issues that should be prioritised, and to be ready to respond to the situation. During the stay at the project sites, work focused on activities that could only be carried out on site, such as checking the status of equipment management and funds at the project offices. At the closing of the project office, efforts were made to ensure that a series of tasks including documentation and bank-related procedures could be carried out smoothly during the short stay at each project site, by classifying tasks that could be done remotely and those that could only be done on site, and by coordinating with local staff before the travel.

Chapter 5: Recommendations for Achieving Overall Goal after the Project Completion

5.1 Prospects for Achievement of Overall Goal

The Overall Goal of the Project and its indicators are as follows. They are expected to be achieved by 2026, three years after the completion of the Project period.

Overall Goal:
Universal health coverage is promoted by improving access and utilization of primary health care through Community-based Health Planning and Services (CHPS)

Indicator:
Coverage of the population in the functional CHPS zones of northern regions is reached by the end of 2026 as following table.

Table 5-1: Percentage of Population Covered by Functional CHPS Zones and Target Value in 2026

Region	2017	2023	2026 (Target)
Upper West Region (UWR)	55.2%	98.9%	100%
Upper East Region (UER)	31.1%	100%	100%
Northern Region (NR)	9.6%	45.6%	75%
North East Region (NER)	NA	47.5%	100%
Savannah Region (SR)	NA	66.5%	100%

Calculation method: Number of population covered by functional CHPS zones / Regional population ×100

The Overall Goal is expected to be achievable by 2026.

As shown in Table 5-1, as of Q1 2023, the Upper West Region (UWR) and Upper East Region (UER) had almost achieved the target of 100%. The remaining regions, the Northern Region (NR), North East Region (NER), and Savannah Region (SR), achieved between 45% and 60%. However, given that the demarcation of CHPS zones progressed to almost 100% in all five regions, outstanding work is needed for Community Health Officers (CHOs) to begin providing services in the demarcated CHPS zones. In this regard, regions have already developed plans for CHO training until 2026, and there is a good prospect of achieving this target.

According to the evaluation of the counterparts (CPs) (see Chapter 3, 3.7), the establishment of the CHPS database (CHPS-DB) system and introduction of the Project's newly developed CHO training system (District CHO orientation and pre-service training) had a particularly significant impact in improving CHPS implementation. The CHPS-DB has enhanced the visibility of the situation in each CHPS, facilitating the proper allocation and deployment of human, material, and financial resources, as well as the development of more realistic strategies and plans. The new training system for CHO training was not only considered to have a greater impact but also to be a more sustainable and effective, as it was found to be less expensive and simpler to operate and manage than traditional training.

In addition to the continuation of these activities, it is expected that the Ghana Health Service (GHS) will continue collaborating with the District Assembly (DA), development partners, and other stakeholders in the future. This collaboration, facilitated through regular District Health Quarterly Performance Review (DHQPR) meetings and the implementation of the Health Integrated Annual Action Plan (HIAP), aims to secure support for CHO training, Community Health Volunteers (CHV)/Community Health Management Committee (CHMC) training, medical facilities, and equipment, as well as transport. Furthermore, the attainment of these targets would be more achievable with the reinforcement of the support system for CHPS, in alignment with the Government of Ghana's intensified efforts to strengthen the sub-district health system, concurrent with the enhancement of CHPS implementation.

5.2 Recommendations for Achieving the Overall Goal

Achieving the Overall Goal requires a two-pronged approach: improving access to CHPS services and promoting the use of CHPS services by the population. Possible solutions for these two aspects are described based on the challenges and solutions of the activities and the assurance of continuity.

5.2.1 Improving Access to CHPS Services

The basis for improving access to CHPS services is the proper operation of the CHPS database (CHPS-DB) introduced by the Project: proper collection and management of CHPS data, appropriate use of the data by the GHS, planned training and staffing, construction of CHPS facilities and equipment, and provision of transport. Cooperation between regions and DAs is also key in relation to facility construction, equipment deployment, and the provision of transport. The steps to be taken by all parties to improve this are listed below.

(1) Continued Operation of the CHPS Database (PPMED Director, GHS HQ)

For the CHPS-DB to continue to operate and be utilised nationwide, the person in charge of the district and region must update the CHPS-DB in each region and use the data for DHIMS 2 entry and GHS HQ monitors. It is also important to coordinate with other development partners in the use of this database and encourage them to understand the significance of this system. PPMED has agreed to and is actively cooperating with the operation and utilisation of the CHPS-DB throughout the country.

(2) Strengthening the Management System of the CHPS Database (PPMED Director, GHS HQ)

Appropriate personnel, facilities, and equipment deployment in CHPS zones can be strengthened by properly collecting and managing CHPS data. For this reason, it is necessary to strengthen the capacity of the data management unit and ensure proper handover when necessary. Strengthening the capacity of the CHPS-DB was conducted in 16 regions across the country during the Project period, with PPMED leading

a feedback meeting for the 16 regions at the end of the Project. Such training and meetings must be organised regularly to maintain the quality of the staff. To this end, there is also a need to establish a system for the proper operation of this database and its training, led by PPMED, in cooperation with other development partners. It is also necessary to strengthen the system to appropriately share the results of the analysis of this database with relevant institutions, such as Regional Health Management Teams (RHMTs) and District Health Management Teams (DHMTs), Human Resources Division, Nursing Training Schools, Regional Coordinating Council (RCC), and DAs.

(3) Strengthen Human Resource Development, Planning and Training Implementation Using CHPS Database (RDHS and DDHS)

RHMTs should determine the number of CHOs that need to be deployed in each district based on the results of data analysis and request DHMTs to develop training plans for CHOs. Based on this plan, DHMTs will also conduct training, such as DCHOO, with the support of the RHMTs. Currently, there are variations in district resources, including human resources, and the number of model CHPS that can conduct DCHOO; therefore, as an initiative, the RHMT needs to consider these factors and monitor implementation accordingly. Similarly, it is necessary to identify CHPS that were classified but had not started service provision based on the results of the data analysis, identify the causes and solutions, and take action to address them. Both the GHS and the Ministry of Health (MOH) are aware of the shortage of human resources; however, owing to the lack of national budgets, they are not deployed timely. Therefore, it should be considered to utilise the NOP budget to strengthen the CHPS.

(4) Development of Human Resource Development Strategy and Creation of Career Paths for CHOs (PPMED Director, GHS HQ, RDHS and DDHS)

The shortage of CHOs is not only related to the lack of employment and training but also to CHO turnover. Many CHOs leave their jobs to attend midwifery or other schools to advance their careers while working in the CHPS zones as CHOs. Regions need a human development strategy that considers the turnover of CHO after two to three years. It is important that GHS creates career paths for CHO who have completed duty as CHO for minimum term duty to gain the advantage of further education as a national strategy, which can prevent early turnover of CHO.

(5) Strengthening Collaboration with RCC and DAs (RDHS and DDHS)

Under the CHPS policy, the establishment of CHPS zones and the location of CHPS facilities are determined by DAs and DHMT. RHMT and DHMT must share information from the CHPS-DB with DAs to support the demarcation of CHPS zones. The national CHPS implementation guidelines also specify the role that RCC and DAs should play in the CHPS implementation, construction of CHPS facilities, provision

of equipment and transport, and training of health personnel. RHMT and DHMT need to strengthen their relationships with RCC and DAs and work together to ensure that RCC and DAs perform these roles appropriately, utilising HIAP and CHPS-DB information.

(6) Strengthening SDHT Health Systems through Networks of Practice (NOPs) (PPMED Director, GHS HQ, RDHS and DDHS)

The NOPs programme, the Government's new roadmap for achieving Universal Health Coverage (UHC), aims to strengthen the health sector's commitment to identifying innovative approaches to improve access to quality healthcare and community-based services and strengthen the capacity of the sub-district health system, including health centres and CHPS. In line with the direction of this NOP initiative, the United States Agency for International Development (USAID) also focuses on capacity building of the sub-district health system, including health centres and CHPS. As part of its support to Sub-District Health Teams (SDHTs), it plans to expand its activities for CHPS using the supportive supervision (SS) checklist developed by the Project, which will also benefit from collaboration with USAID. It would also be useful to use the Global Fund to promote health-system-strengthening activities in SDHTs.

5.2.2 Promoting the Use of CHPS Services

Another pillar for achieving the Overall Goal is to ensure that communities have adequate access to CHPS with a minimum package in place. This minimum package includes immunisation, disease surveillance, nutrition, and maternal health services. The improvement of health indicators and the achievement of the Overall Goal are closely linked, and it is essential for CHOs and health service providers to provide quality care services as well as educational activities to increase the population's health awareness and promote the community's appropriate use of CHPS services.

(1) Factors Hindering the Achievement of Maternal and Child Health Indicators and Some Proposed Interventions (FHD Director, GHS HQ, RDHS)

The Project used maternal health indicators as a measure of the utilisation of minimum package services in the CHPS zones (Output Indicator 4-4). The results showed that, despite improvements in access to a functioning CHPS, maternal and child health-related indicators that measure the use of services such as antenatal care (ANC), institutional delivery, and postnatal care (PNC) did not improve considerably after the Project intervention. However, the Project was unable to verify these findings or observations, which remains a challenge. To promote service utilisation, it is important to first explore the factors leading to this gap and identify solutions based on the results of this verification. The Project also strengthened maternal, child, and adolescent health through training in Life-course Approach (LCA) services and subsequent practice in the field. Maternal and child health indicators are expected to improve through training and field

practice. To achieve this, discussions were held with RHMT to strengthen early education on pregnancy and childbirth through adolescent health. For example, improvements were made to strengthen the leadership capacity of CHOs in mothers' education through ANC and PNC. At the central level, the FHD at the GHS HQ is also expected to guide and advocate for improved maternal and child health indicators through LCA-related services.

(2) Further Strengthening the Referral System: Use of Referral Forms and Referral Feedback (ICD Director, GHS HQ, RDHS, DDHS, Hospital Director)

Strengthening the referral system is critical in ensuring continuity of care for patients and gaining client confidence in healthcare services. The referral and referral feedback forms and referral registers introduced by the Project in the target regions and pilot districts, as well as the monthly monitoring reports, are essential tools for the operation of quality referral services. In conjunction with the promulgation of the new national referral policy and technical guidelines, the introduction of these tools in other regions should be promoted. It is also envisaged that with the increase in non-communicable diseases, there will be a greater need to practise continuous care and monitoring of patients in both lower and upper health facilities. Referral feedback from upper health facilities is vital information for lower health facilities to follow up with patients appropriately, and such awareness of health facilities at all levels and RHMT and DHMT officials should be strengthened to promote collaboration between facilities. Additionally, the GHS HQ, RHMT, and DHMT should promote the formal introduction and operational strengthening of monthly monitoring reports as a tool to regularly check the implementation of referrals.

(3) Further Strengthening of Supportive Supervision (ICD Director, GHS HQ, RDHS, DDHS, Head of SDHT)

Ensuring and maintaining the quality of CHOs and healthcare service providers requires a mechanism to continuously strengthen their capacities. The Project proposed a quarterly SS for CHPS as the first mechanism and demonstrated its effectiveness and feasibility through pilot activities. The checklist developed by the Project was already introduced into the national program, and a digital version of the checklist is accessible in all regions. Therefore, it is expected that the five target regions will promote its dissemination within their regions, whereas the GHS HQ will promote its introduction and establishment in other regions to strengthen the functions of the CHPS and health centres. It is also important to establish a system to regularly review the contents of the checklist and ensure that SS is an activity that meets national policies and the needs of the field. Moreover, it is expected that creating field-level incentives for each district to continue regular supervision, such as adding the results of supervision to the district and regional annual performance evaluation items, will strengthen the same activity.

(4) Strengthening Coordination and Implementation Systems for CHAP and Community Scorecard

Initiatives (Health Promotion Division Director, GHS HQ and RDHS)

To promote the use of CHPS by community residents and primary healthcare and disease prevention among community members, it is important to ensure that people are aware that they are responsible for their own community health and carry out community health promotion activities.

The Community Scorecard, introduced as an initiative of PPMED at GHS HQ, allows community members, mainly CHMCs, to monitor the quality of services provided by CHOs, SDHT, and DHMT and ensure that the results are reflected in the Community Health Action Plan (CHAP). This promotes community management of CHPS and fosters people's ownership. USAID's Community Engagement for Health and Wellbeing (CE4HW) programme, led by the Health Promotion Division (HPD) at GHS HQ, improves health indicators through CHAPs and strengthens CHAP monitoring. The PPMED and HPD, the Regional CHPS Unit, and the Regional Health Promotion Unit, responsible for these programmes respectively, can work in synergy.

(5) Facilitating the Deployment of Midwives to CHPS Zones (FHD Director, GHS HQ, RDHS and DDHS)

As mentioned earlier, while the examination of the factors hindering the improvement of maternal and child health indicators and the identification of solutions is a future challenge, some possible factors include the lack of adequate antenatal care, delivery at a facility, and postnatal care services in CHPS zones. This may be partly due to the inadequate deployment of midwives specialising in the provision of this service in CHPS zones and the lack of facilities and equipment to provide delivery services. This is because the CHPS zone was originally only allowed to handle emergency deliveries. It was only recently that they could handle normal deliveries at CHPS. Therefore, midwives specialising in providing these services have not yet been fully deployed in the CHPS, which may partly be due to the lack of facilities and equipment to provide delivery services. According to the CHPS-DB, midwives were deployed in approximately half of the CHPS zones in the five target regions; however, even at that time, there was a lack of space and equipment for delivery services. The deployment of midwives in CHPS zones is the key to improving the indicators of service provision for early ANC and institutional delivery. Therefore, more accurate data regarding the number of midwives in CHPS zones is important.

(6) Standardisation of Health Screening Registers (PHD Director, GHS HQ)

The Project developed a health screening register to obtain data on PDM indicators. CHOs were trained using the register during CHO/SDHT refresher training on LCA. CHO used registers provided during the training. The summary data of the register by the Project provide necessary information, such as the proportion of border cases and inappropriate follow-ups or referrals, to develop strategies for preventing non-communicable diseases (NCDs). The GHS collects the number of NCDs patients through the DHIMS

2, but not the border cases. Therefore, the Project appealed to the GHS HQ to obtain the data on border cases by utilising the register for the Wellness Clinic to develop a strategy for NCDs. It is crucial that the GHS HQ integrates the register as a nationally standardised tool for the Wellness Clinic.

Chapter 6: Project Summary

6.1 Project Background

The Project, conducted from July 2017 to July 2023, aimed to support the Community-Based Health Planning and Services (CHPS) policy, which has been promoted by the Government of Ghana since 1999, by improving access to and utilisation of Primary Health Care (PHC). Its goal was to contribute to the achievement of Universal Health Coverage (UHC).

The Project was implemented as a follow-up undertaking to the JICA projects conducted in the Upper West Region (UWR) from 2006 to 2011 and from 2011 to 2016, which focused on strengthening CHPS implementation and maternal and child health initiatives. The Project emphasised further strengthening and expanding CHPS, particularly in the northern five regions of Ghana including UWR, with the objective of enhancing life-course approach (LCA) services within the CHPS framework.

6.2 Challenges Observed at the Beginning of the Project

One of the key factors in the CHPS implementation in Ghana is increasing access for residents to functional CHPS facilities. To achieve this, it is necessary to promote the demarcation of CHPS zones, ensure that all residents have access, and appropriately allocate the personnel, facilities, and equipment required for CHPS. However, at the beginning of the Project, the percentage of people with access to functional CHPS was approximately 50% in the UWR, which was the target area of the previous projects. In the newly added regions in the Project, approximately 30% in the Upper East Region (UER), while access was less than 10% in the Northern Region (NR), North East Region (NER), and Savannah Region (SR).

One of the key factors contributing to this issue was the inadequacy of evidence-based resource allocation and management for CHPS implementation. The database for tracking the implementation status of each CHPS was underdeveloped, resulting in an inaccurate understanding of the current situation. Consequently, the demarcation of CHPS zones, and the allocation of resources based on data analysis results, was not conducted effectively. Additionally, there was a lack of capacity among region and district health officials to manage and operate data. Furthermore, in addition to improper personnel allocation to CHPS, there was a shortage of Community Health Officers (CHOs). Budgetary constraints at the national level affected employment. Another factor was that the training of CHOs did not proceed as planned. While training programmes for CHOs existed, the substantial costs associated with their implementation made it challenging for the Ghana Health Service (GHS) to conduct training without support from JICA and other development partners. Moreover, the high turnover rate among CHOs exacerbated the personnel shortage.

Another challenge in CHPS implementation was the insufficient provision of services to address the rising prevalence of non-communicable diseases. In Ghana, changes in socio-economic conditions have led to

non-communicable diseases and aging becoming new challenges. The 'CHPS National Implementation Guidelines, September 2016' also emphasised the need for CHPS to address lifestyle diseases, non-communicable diseases, and aging-related issues. However, training programmes and materials to enhance the capabilities of CHOs in this field were lacking. As a result, CHOs lacked the necessary skills to address these new challenges and diseases adequately. Issues such as CHOs unable to accurately calculate Body Mass Index (BMI) and a lack of records for health screening of residents were observed in the field. Additionally, a system to monitor the activities and situations of these CHOs was inadequate, and there was a lack of capacity within Sub-District Health Team (SDHT) to supervise CHOs effectively.

Furthermore, there was a lack of understanding among Community Health Volunteers (CHVs) and Community Health Management Committee (CHMC) regarding their roles and the services that CHPS should provide. This hindered community-based activities, such as awareness campaigns through the Community Health Action Plan (CHAP), which they should have been actively involved in.

6.3 Progress in Addressing and Improving Challenges through Project Implementation

In addressing these challenges, the Project focused on two main pillars: (1) strengthening the evidence-based resource allocation and management for CHPS Implementation (expanding from UWR to the four project target regions); and (2) enhancing the provision and utilisation of Life Course Approach (LCA) services in CHPS.

Under the first pillar, the Project expanded the utilisation of the CHPS database (CHPS-DB), which had been introduced in the UWR during the previous projects, to the four Project target regions. The Project conducted data collection, capacity building for Regional Health Management Team (RHMT) and District Health Management Team (DHMT) staff in data analysis, operation, and management, and provided support in establishing the database. Continuous data analysis was conducted, leading to the proper demarcation of CHPS zones in the target regions. As a result, by the end of the Project, the demarcation rate in the five project target regions had reached nearly 100%. Furthermore, the allocation status of CHPS personnel and equipment became clear, enabling a more equitable allocation based on the current situation. RHMTs now use the data to manage and monitor the implementation status of each CHPS zone and for strategic planning. Additionally, the results of this data analysis serve as evidence when requesting necessary equipment and budgets from District Assembly (DA) and development partners.

Thanks to the CH, the placement of CHOs also became clear, and the required number of CHOs was determined. Consequently, each RHMT was able to develop CHO training plans; by the end of the Project, CHO training plans were formulated for the five Project target regions, extending up to 2026.

Moreover, the Project introduced low-cost training approaches such as Pre-Service Training and District CHO Orientation (DCHOO), which could be implemented more widely. As a result, while the Project was

implemented, approximately 3,300 students from teacher training schools received Pre-Service Training. The number of CHOs trained through District CHO Orientation reached 1,100, surpassing the initial target by 20% to 200% in four of the five target regions. District CHO Orientation, in particular, was aligned with Ghana's needs, not only because of its low cost but also because it allowed for long-term one-on-one mentoring in the field, ensuring the quality of CHOs. This approach is being continued in all target regions.

As a result of these efforts, the number of people with access to functional CHPS increased from approximately 1.1 million (2017) to 4.12 million (2023) in the five project target regions, nearly quadrupling since the Project's inception. This is approximately 70% of the total population of the five northern regions, a dramatic increase from 20% in 2017. The percentage of people with access to CHPS with health staff increased from approximately 3.46 million (2017) to 5.66 million (2023), approximately 94.8% of the population is covered. Particularly, UER and UWR achieved almost 100% coverage.

Furthermore, the introduction of CHPS-DB extended beyond the Project's target regions to all sixteen regions nationwide under the initiative of the Ghana Health Service (GHS) headquarters' Policy Planning, Monitoring and Evaluation Division (PPMED). The utilisation of this database is expected to bring about improvements in CHPS implementation across the country. Regarding CHO training, District CHO Orientation has been introduced to regions other than the five Project target regions, and training materials have been distributed as well. Training sessions using these materials have commenced in the Bono East and Eastern regions. Additionally, study tours to UWR have been conducted to enhance inter-regional cooperation for further strengthening this activity.

The second pillar involved defining LCA at the CHPS level in Ghana and developing training programmes and materials for LCA-related services, such as addressing non-communicable diseases and elderly care, as part of the minimum package provided by CHPS. This training programme was developed and improved through training for enhancing the capacity for LCA service provision, targeting CHOs and SDHT staff in the UWR. The programme was integrated into Pre-Service Training and District CHO Orientation, ensuring the continued enhancement of LCA capacity among CHOs after the completion of the Project. Additionally, the Project developed a Health Screening Register to share screening results with the Northern five regions and GHS headquarters.

At the community level, awareness of community members' LCA has expanded through training programmes targeting CHO, CHMC, and CHVs who have undergone the aforementioned training. This led to the inclusion of activities related to LCA in Community Health Action Plans (CHAP), including health promotion, support for nutrition classes, health screening assistance, and elderly care, activities that had not been conducted before the Project started. As a result, the percentage of community aware of LCA increased from 5% at the baseline survey to 90% at the end-line survey. Furthermore, the CHMC/CHV training materials developed by the Project for LCA and CHAP training are being used in CHMC training programmes by development partners such as the United States Agency for International

Development (USAID) and the United Nations Development Programme (UNDP). Thus, LCA-related training targeting CHMCs and CHVs is expected to continue.

6.4 Factors in Addressing Challenges and Ongoing Issues

In promoting the measures to address the aforementioned challenges, especially the task of increasing access to functional CHPS, two main factors are identified.

The first factor is that the establishment of CHPS-DB brought visibility to the current status of each CHPS facility, enabling the proper allocation and placement of human, material, and economic resources. For the intervention to strengthen CHPS implementation, having foundational data is crucial and building a data collection system becomes necessary. Through the construction of the CHPS-DB system in this Project, region and district health departments gained access to detailed data for each CHPS facility, allowing for the development of more comprehensive strategies. Moreover, the presence of data for each CHPS facility enabled the proper allocation and placement of human, material, and economic resources, the identification of problematic CHPS facilities, and the ability to focus on targeted approaches. Consequently, the importance of data and database construction was recognized by the counterparts (CPs).

The second factor is that the introduction of systems built by the Project for strengthening CHPS implementation, including the CHPS-DB system, was driven by evidence obtained through practical demonstration in various Ghanaian regions.

CHPS-DB, which was developed and implemented over approximately 10 years in the UWR through two previous JICA projects, contributed to the improvement of CHPS implementation. The effectiveness of the CHPS database was demonstrated through practical implementation in the field. By presenting this evidence to the Ghanaian authorities, its effectiveness was further recognized. Subsequently, the Project expanded the introduction of this system to the four Northern regions in addition to the UWR. This expansion further demonstrated the improvement in CHPS implementation achieved, leading to an even deeper recognition of its effectiveness by the GHS headquarters and other regions, ultimately leading to nationwide adoption. The evidence of the increase in the number of CHOs trained through District CHO Orientation also garnered interest from regions beyond the Project's target regions and led to its adoption.

Remaining challenges include issues related to the employment of CHPS personnel by GHS and the Ministry of Health. Remaining challenges include issues related to the recruitment of personnel for CHPS by the GHS and the Ministry of Health. While the Project has established a system for training CHOs, a fundamental problem is the shortage and improper distribution of Community Health Nurses (CHNs), who are the target for the training, within each region, due to the country's budget constraints.

Additionally, the data from CHPS-DB are not being used in the District Health Information Management System 2 (DHIMS 2), and the improvement in the quality of DHIMS 2 data has been slow. The Project

addressed this by collecting CHPS-DB data by mid-month and inputting it into DHIMS 2 by the end of each month to improve accuracy and alignment with CHPS-DB. However, this remains a challenge to be resolved in the future.

Regarding the nationwide dissemination of CHPS-DB, while it was rolled out to all 16 regions during the Project period, ongoing updates of data will require commitment and leadership from directors of Regional Health Administration, CHPS coordinators, and Health Information Officers (HIOs) in each region. Continual monitoring of CHPS-DB utilisation by the PPMED at the GHS headquarters, as well as collaboration and cooperation between the Project's target Northern five regions and other regions, will be essential. Additionally, as urban CHPS has different conditions and circumstances from rural CHPS, it is necessary to define CHPS functionality based on its specific conditions, as well as strengthening its implementation in line with the CHPS National Implementation Guidelines.

6.5 Projected Achievement of Overall Goal and recommendations for Achievement

The Overall Goal of the Project is to 'contribute to the achievement of Universal Health Coverage (UHC) by improving access to and utilisation of Primary Healthcare (PHC) through CHPS'. This goal is closely related to CHPS policy. The key indicator to measure the achievement of this goal is 'increased coverage of CHPS that meets the standards in the Northern regions by 2026'. The target values are set at 100% for the UWR, UER, NER, and SR, and 75% for the NR. As of the first quarter of 2023, the UWR and UER have achieved 98–100% coverage, almost meeting the target values. The other three regions range from 45% to 66%. However, with CHPS zone demarcation reaching nearly 100%, and the fact that training plan for CHO until 2026 has been established based on the implementation rate of CHPS, it is fair to say that there is ample potential to achieve the target values.

The following two main approaches are required to achieve the Overall Goal.

The first approach is to increase the number of functional CHPS through the deployment of CHOs, and to achieve this, it is essential to continuously train personnel to become CHO. As previously mentioned, there is a existing challenge regarding the proper distribution of CHNs in each region. To address this, it is essential for RHMT and DHMT to assess the staff situation through the CHPS-DB and use the results to develop plans in anticipation of future staffing needs, and continuously conduct the training. To facilitate this, the utilization of District CHO Orientations becomes an effective approach.

Additionally, enhancing the operation and management of the CHPS-DB system and presenting the evidence-based results to region and district stakeholders will deepen their understanding of CHPS implementation. Cooperation with Regional Coordinating Council (RCC), District Assembly (DA) and other development partners is crucial in utilising data as evidence to advance the acquisition and placement of CHPS facilities, equipment, and transportation.

The second approach is to promote the utilisation of CHPS services by communities, with an emphasis on further strengthening Supportive Supervision (SS). SS identifies the knowledge and skills required by CHOs while ensuring that district and SDHT provide appropriate support. Moreover, it is important for stakeholders in health services, such as CHOs, CHMC members, and CHVs, to recognise the importance of health promotion from a long-term perspective, considering the life course of each individual and the social, economic, and demographic prospects of each community. Strengthening the capacity of CHOs for community support is essential to enable community-based health activities using the Community Health Action Plan (CHAP).

6.6 Conclusion

Through the implementation of the Project, the percentage of people with access to CHPS has increased, and CHPS implementation rates have improved. The systems built by the Project for CHPS implementation have been widely adopted nationwide and have made significant contributions to improving CHPS implementation across Ghana. Regarding the LCA, the Project began with the fundamental task of defining LCA in Ghana's CHPS and ensured continuous capacity building for CHO personnel by developing teaching materials and incorporating LCA into CHO training. While some indicators related to CHO skills were not fully achieved, it is important to note that these improvements require field experience, and plans have been made for continuous improvement through monitoring by district health departments. For some aspects of the Project Purpose that were not fully achieved, it is crucial for Ghana to continue its efforts in implementation according to the established plans.

Finally, the Project team would like to highlight a few important considerations that the team took into account during the Project implementation. First and foremost, ensuring sustainability and tailoring activities to the needs of CPs were of utmost importance. Sustainability was primarily ensured through the integration of Project activities into the country's systems. Involving the GHS HQ in the capital from the outset, ensuring that the HQ personnel understand the benefits through close communication, and having them actively participate in system integration were key to success. To empower CPs to take ownership of the activities, ample time was provided to explaining and reaching agreements with CPs, not only at the regional health department level but also with district health department directors and relevant agencies. While the Project provided content, CPs conducted presentations and training, which increased ownership and ultimately led to ‘CP-led activities by CPs’, ensuring the sustainability of the activities.

Furthermore, as the Project targeted five regions compared to the previous single-region projects in the UWR, efforts were made to maximize the benefits of the larger-scale project. For example, efforts were made to strengthen networks, cooperation, collaboration, and healthy competition among the five regions, resulting in improved outputs. Regarding the expansion of CHPS-DB, the Project established a mutual support system between the five Northern regions and the other eleven regions, promoting the continuity

of activities through cooperation among CPs. The Project was also able to provide the GHS headquarters with compelling recommendations through practice in a number of regions.

Appendices