

# 12 YEARS OF SWISS-TANZANIAN COOPERATION



Health Promotion  
and System  
Strengthening (HPSS)  
Project



Schweizerische Eidgenossenschaft  
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Swiss TPH



Swiss Tropical and Public Health Institute





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### About the HPSS Project

Over 20 peer-reviewed publications on the project have been published. These and more information on the project are available on the website:



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# AT A GLANCE



Good health is the cornerstone of development and economic growth. In Tanzania, significant efforts have been made to improve the healthcare system. However, the path to achieving universal access to quality healthcare for all citizens has been marked by significant challenges. Families faced financial hardship when dealing with costly medical bills, especially during serious health crises. Access to essential medicines and functional medical equipment was often limited. Communities lacked the knowledge and resources to address their health issues effectively.

## The HPSS Project's vision

The Health Promotion and System Strengthening (HPSS) Project had a clear vision for its support to the Government of Tanzania: to comprehensively address healthcare challenges at various levels simultaneously, creating sustainable improvements in Tanzania's healthcare landscape. It aimed at enhancing the well-being of the population, including people living in rural areas and those with low-income jobs in cities. The goal was to provide solutions for improving healthcare access, particularly for the most economically disadvantaged. HPSS understood that accessible, high-quality healthcare required a holistic approach, strengthen-

ing the healthcare system sustainably. This involved offering technical assistance, digital solutions, and data and evidence-driven policy decisions through operational research. In such a health system strengthening framework, HPSS played a key role in transforming the Community Health Funds into a functional health insurance system, ensuring a consistent supply of medicines, maintaining medical equipment, and empowering communities to actively engage in health promotion.

*“HPSS implemented innovations at crucial junctures within the health system, benefiting the entire nation.”*

Funded by the Swiss Agency for Development and Cooperation (SDC) and implemented by the Swiss Tropical and Public Health Institute (Swiss TPH) in partnership with the Ministry of Health and the President's Office - Regional Administration and Local Government, HPSS embarked on its journey as a pilot project in Dodoma in 2011. This pilot soon blossomed into a flagship of Swiss-Tanzanian cooperation. After



a successful initial phase, the project expanded to the Morogoro and Shinyanga regions.

### Nationwide impact

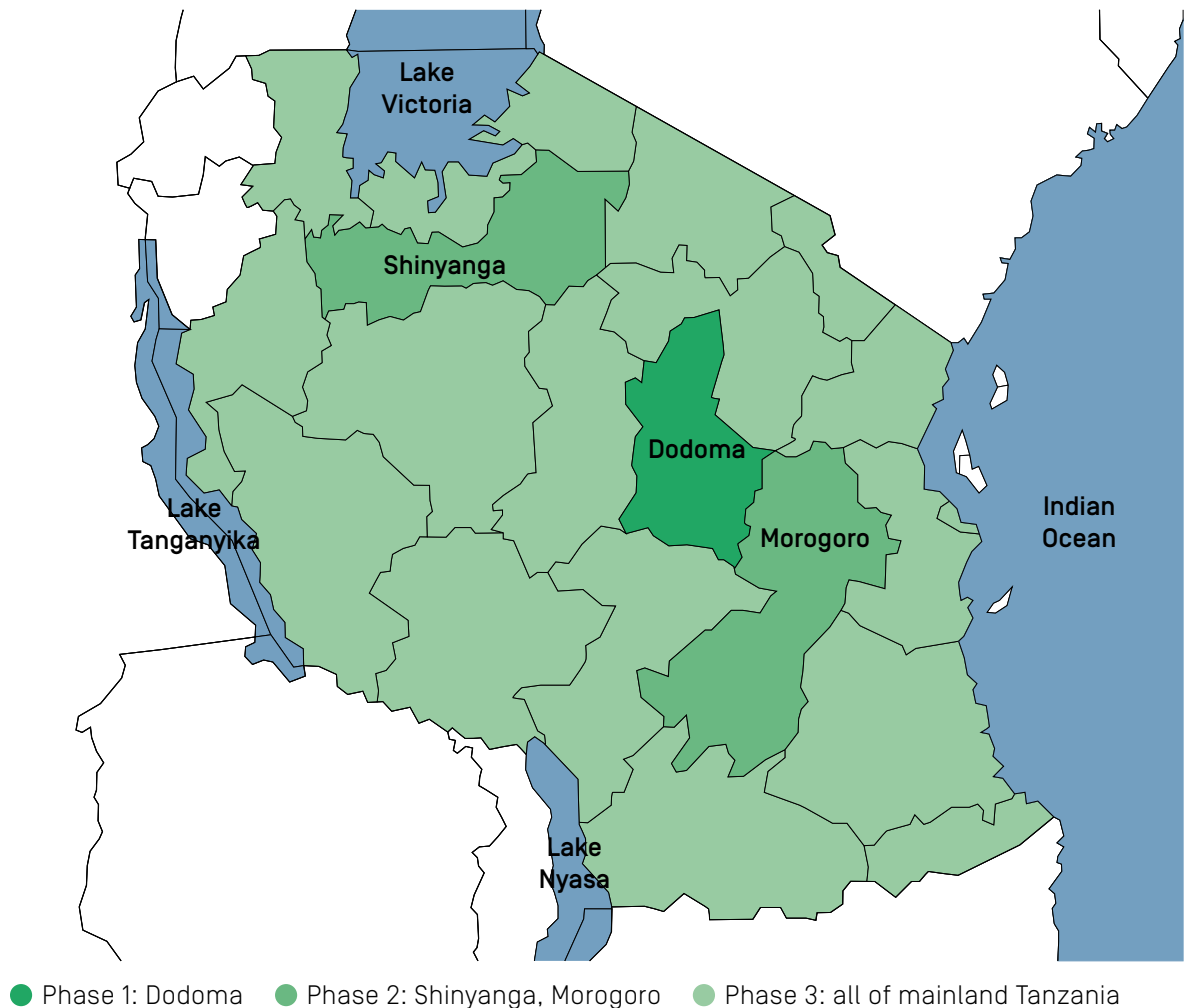
From 2018 to 2023, HPSS extended its operations nationwide, covering all 26 regions of mainland Tanzania with the goal of integrating innovative solutions into the national health system. Notable achievements included a substantial increase in medicines availability through the Jazia Prime Vendor System programme and the enrolment of citizens in the affordable health insurance scheme the “improved Community Health Fund” (iCHF).

### Strengthening healthcare capacities

The HPSS Project has been instrumental in elevating healthcare delivery in Tanzania through its integrated approach. It played a pivotal role in developing IT systems for managing medical equipment, health insurance, and medicines procurement. These IT systems are operated by the Government of Tanzania and are fully integrated into their IT policy. The project intro-

duced new training courses to bridge skill gaps among medical dispensers, health technicians, and health promotion specialists, which now form part of the national educational system as accredited and certified courses. It also enhanced the capacity for managing medical equipment by establishing maintenance and repair workshops and supporting a national calibration centre. This system strengthening approach fortified the Tanzanian healthcare system and significantly expanded healthcare access for citizens. HPSS identified and implemented various innovations at crucial junctures within the healthcare system, benefiting the entire nation.

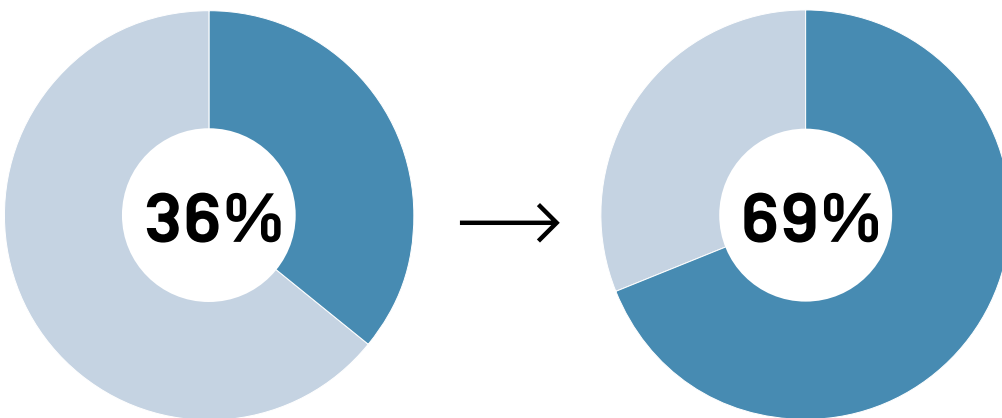
After an impressive 12-year journey of unwavering commitment to improving Tanzania’s health system, the HPSS project is coming to an end. HPSS has made healthcare more accessible, affordable and effective for all Tanzanians, regardless of their circumstances, and has had a major impact on improving people’s health and well-being.



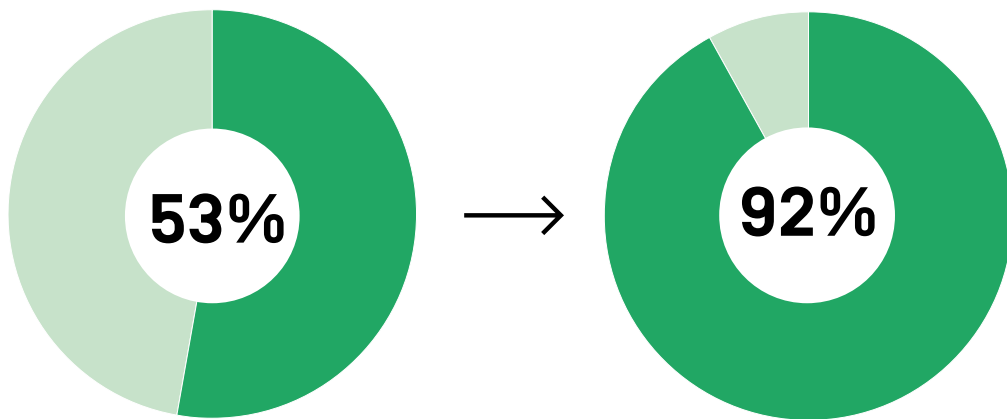
# KEY FIGURES

Enhanced access to medicines and health commodities, enhanced coverage with iCHF, enabling members affordable treatment in **over 8000** public health facilities

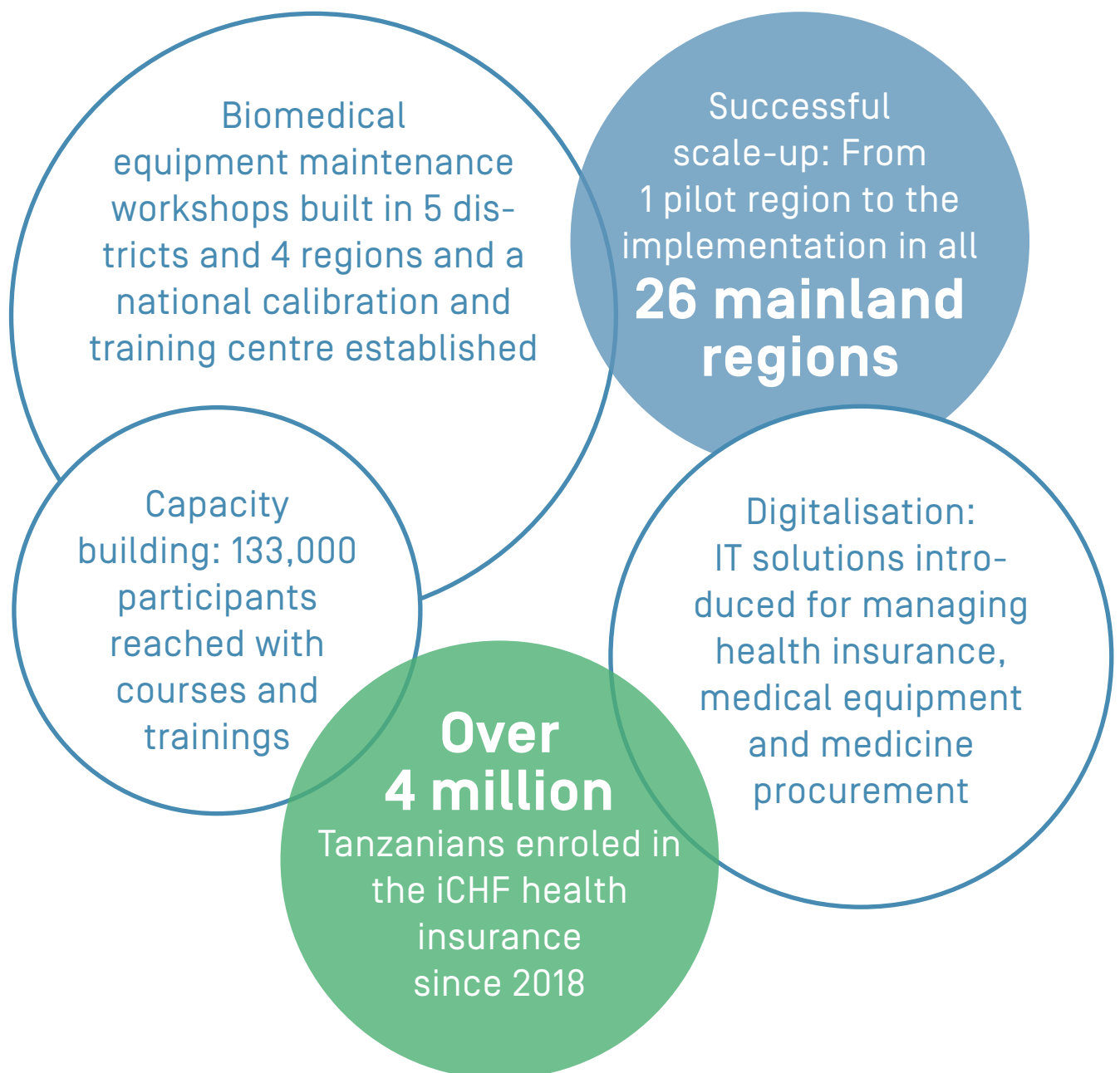
**2.6 million** treatments recorded from iCHF members at health facilities



**Better maintenance:** Regular inspection of buildings and medical equipment increased from 36% in 2011 to 69% in 2018



**Improved health supply chain:** Availability of medicines increased from 53% to 92%



# INTRODUCTION

## What Is Unique About the HPSS Approach?

The HPSS project worked in a multisectoral, interdisciplinary and systemic manner, pursuing several interrelated and complementary approaches.

On the one hand, the Swiss-Tanzanian cooperation project emphasised health promotion and preventive interventions to improve the health of the population. On the other hand, the HPSS project emphasised the need for a well-functioning health system in Tanzania.

Although the health status of the population depends on many other factors and determinants, the availability of quality health services is important for people's health. Additional challenges arose from the double burden of

disease that Tanzania faces due to the co-occurrence of communicable and non-communicable diseases.

A strong and resilient health system is key to sustainable improvements in the delivery of healthcare and people's health. The HPSS project has always taken a health system strengthening approach, emphasising the need to respond to the dynamic and ever-changing health system landscape within the policy context, with a focus on health system resilience and adaptability. This included a variety of measures such as policy dialogue to review policies and adapt them to the changing needs of the health sector, investment in repair and maintenance services, improved availability of medicines, and the establishment of a strong social health insurance scheme, among others.





# HPSS: Improving People’s Health Through Stronger Systems



Fig.1: A strong, resilient health system is key to achieving sustainable improvements in health. Adapted from de Savigny and Adam (2009).

# MAIN ACHIEVEMENTS

## Health Financing: Reforming Health Insurance for Low-Income Populations

In Tanzania, both rural and urban households struggle with high healthcare costs, often exceeding 10% of their monthly income. Approximately 70% of Tanzanians live in rural areas, earning an average of TZS 169,375 (67 USD) per month from agriculture (in 2020). Despite progress in poverty reduction, nearly 44% of the population lives below the international poverty line of 2.15 USD per day. This forces families to choose between paying for healthcare and other essential expenses. To make healthcare accessible to all, health insurance initiatives must recognize the importance of affordability, as affordable premiums are crucial for widespread, positive impact on the population.

### Advancing Universal Health Coverage

To mitigate this challenge and propel the Tanzanian Government's Universal Health Coverage (UHC) agenda, Swiss TPH, through the HPSS project, collaborated with the Government to create a comprehensive health insurance system tailored to rural populations and the informal sector. This system grants access to healthcare nationwide, encompassing over 8,000 health facilities, from dispensaries to regional hospitals. Specifically designed for economically vulnerable populations, including low to moderate-income earners, it aims to enhance accessibility to quality healthcare.

### Community Health Fund (iCHF)

Central to this insurance reform is the modernisation of the "Community Health Fund" (CHF) into the digitalised "improved CHF" (iCHF). Primarily targeting informal sector workers such as farmers, food vendors, and artisan miners, it also extends coverage to lower and moderately earning workers. Key drivers of iCHF's success include an integrated IT system that fosters collaboration among stakeholders and community-based enrolment officers, reducing the need for extensive travel to access health insurance services.



### Affordable and accessible healthcare

iCHF introduced an affordable health insurance system, offering an attractive benefits package, simplified enrolment processes and portability. Access to over 8,000 healthcare facilities is facilitated by a reliable payment mechanism and robust IT management. To ensure affordability for members, government budget allocations primarily finance governmental healthcare services, diminishing the need for iCHF to cover the full costs. This approach ensures that the broader population can access high-quality

healthcare services at an affordable rate, consequently lowering the risk of encountering catastrophic health-related expenses.

### **Navigating challenges and forging ahead**

Despite progress, challenges lie ahead for the Tanzanian Government in this transformative journey. These include strengthening the central-level organisational management of the iCHF, refining marketing and distribution strategies, and clarifying iCHF's role in the envisioned national health insurance framework. Achieving the delicate balance between affordability and quality requires innovative solutions, such as maintaining affordable premiums while focusing on accessing government health services, collaborating with mobile network operators for communication and marketing and leveraging business-oriented sales agents.

### **Key achievements**

- By April 2023, the improved CHF was implemented in all 26 regions and 185 districts and municipalities of mainland Tanzania
- More than 4 million beneficiaries have been enrolled in the iCHF cumulatively, corresponding to 7.6% of the population
- About 8,000 health facilities from primary to tertiary level are providing healthcare to members, including dispensaries, health centres, district and regional referral hospitals
- About 16,500 Enrolment Officers in all villages and urban quarters in mainland Tanzania are mobilising and enrolling iCHF members
- 2.6 million treatment visits of CHF Iliyoboreshwa beneficiaries since 2018, of which 80% took place in primary health facilities
- USD 12.7 million in premiums collected
- USD 9.5 million claims paid to health facilities

### **Digital Innovations: from Tanzania to the world**

A major part of the HPSS project for health financing was the design and development of the Insurance Management Information System (IMIS). This is a comprehensive IT system based on easy-to-use and accessible technology. IMIS provides a centralised web- and smartphone-based application for health insurance operations. It allows for paperless enrolment, management of different benefit packages, collection of premiums and reimbursements to health facilities, and other data needed to run the health insurance. IMIS is fully integrated into the governmental IT systems for hospital management, financial accounting, cashless payments and display and analysis in health information systems.

Initially developed by Swiss TPH for Tanzania, it has become available as open source software embedded in an international initiative ([www.openimis.org](http://www.openimis.org)).





# Medicine Supply and Management: Strengthening the Pharmaceutical Sector

In 2011, an HPSS project study uncovered critical issues in Tanzania's public health system, including frequent stock-outs of vital medicines, inadequate supply chain management and irrational medication prescriptions.

In collaboration with the Ministry of Health and the President's Office - Regional Administration and Local Government, HPSS introduced the Jazia Prime Vendor System (Jazia PVS). This system empowers health facilities to obtain essential health commodities from appointed regional suppliers, called "prime vendors," addressing supply challenges, complementing Medical Stores Department (MSD).

## Enhancing efficiency and accessibility

This groundbreaking logistic system offers multiple benefits, including:

- Enhanced planning
- Quicker decision-making
- Cost-effective purchasing of medicines and health commodities
- Accountability
- Improved healthcare delivery in public health facilities

Initially piloted in Dodoma, this public-private partnership model was rolled out nationwide by 2018. Integrated with the Government of Tanzania Health Operation Management Information System, Jazia PVS replaces outdated paper-based logistics.

## Jazia's success: A national policy

This transformative supply chain model significantly boosted healthcare commodity availability. By fostering transparency and accountability, aligning with safety standards, and maintaining fixed pricing, it elevated medicine availability by over 40% from 2011 to 2018. In 2018, the Tanzanian Government expanded the successful pilot project across all 26 mainland regions, reaching 185 councils. Today,

8,000 health facilities and a population of 61 million Tanzanians benefit from this complementary supply of medical products.

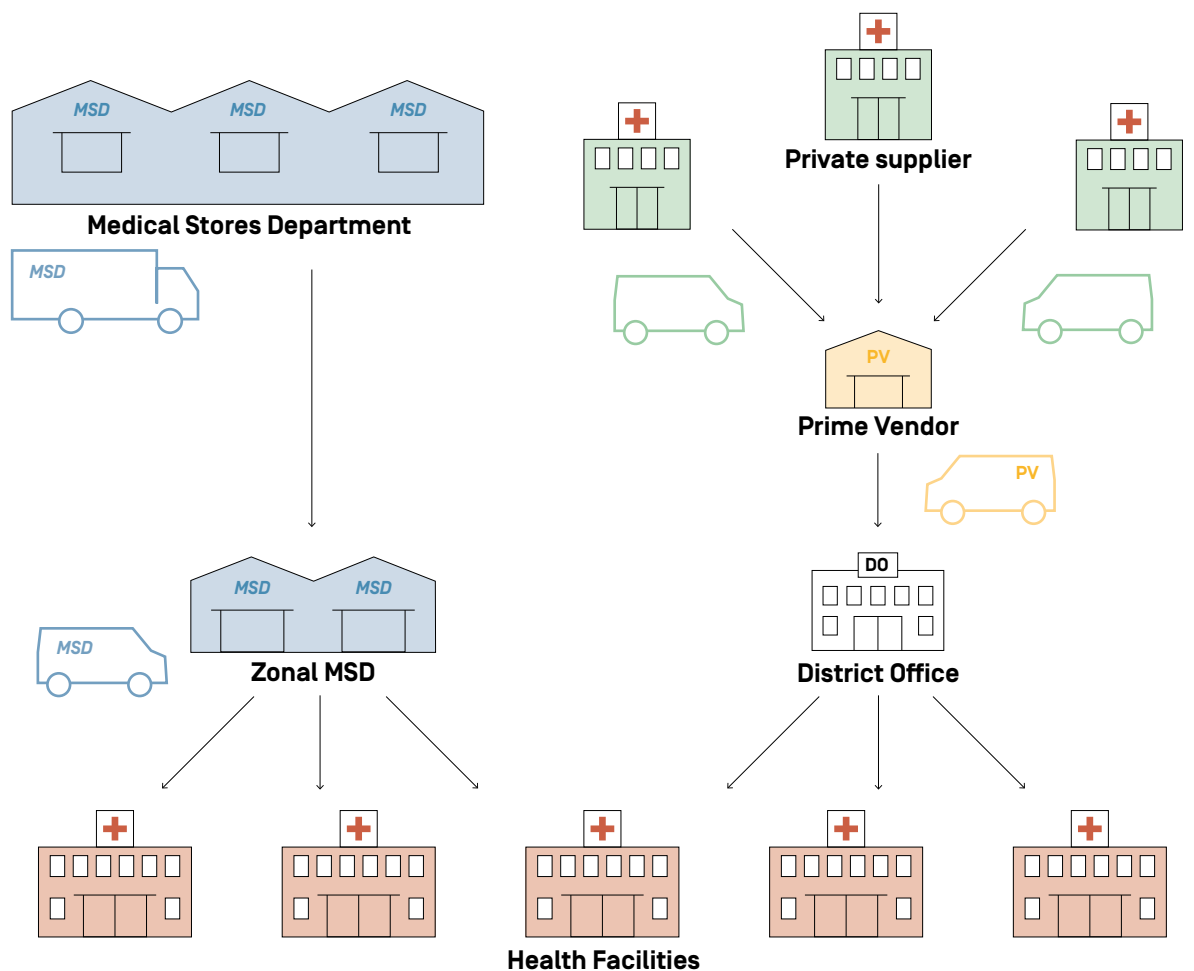
## **Key achievements**

- Unique supply chain model of pooled procurement in a public-private partnership with prime vendors, anchored in national laws and regulations
- Availability of medicines increased from 53 to over 90 %
- Over 20 billion Tanzanian shillings annual value of health commodities procured from all prime vendors
- Transparency and accountability in supply chain improved through good procurement practice, SOPs and audits
- Successful one-year accredited pharmaceutical course implemented to mitigate staff shortage
- Prominent role in collaboration with Ministry of Health to promote responsible use of medicines
- More than 11,500 school children reached as agents of change from 25 Tanzanian schools for raising awareness on antimicrobial resistance

## Holistic system strengthening

The HPSS project took a comprehensive approach, focusing on building a strong foundation across all facets of the pharmaceutical system. Besides supply chains, well-trained and motivated healthcare staff, effective tools and standard operating procedures, and transparent governance were vital components.

The Medicine Dispensers Certificate Course established at St. John's University of Tanzania equips health workers with essential skills, improving patient care and commodity utilisation. HPSS, along with the Ministry of Health and the World Health Organisation, further facilitated the National Action Plan on Anti-Microbial Resistance and supported the Roll Back Antimicrobial Resistance Initiative to promote responsible antibiotic use and raise awareness.



The Jazia PVS complements the official mechanism of the MSD with supplies from competitively selected private vendors in a pooled regional approach, bridging the gap between MSD supplies and health facilities demand.

### Digital innovations: the PVMIS

The Prime Vendor Management Information System (PVMIS), a web-based system for managing the Jazia PVS, was a significant innovation. Fully integrated with the Government of Tanzania Health Operation Management Information System, it enables public health facilities to digitally order, pay and report on medical commodities. PVMIS overcame the challenges of the previous paper-based system, providing faster and more transparent management of logistics data about supply requirements and enabling the timely procurement of supplies. PVMIS gives notifications when MSD products are out of stock and automates pricing, which reduces order creation and processing time, further enhancing the monitoring of Jazia PVS. The system is accessible to multiple users such as health facilities and regional authorities.





*“A child can get sick. If you visit a hospital to see a doctor, you need ten thousand shillings to be attended. Without health insurance it is very difficult in these tough economic times.”*

Khadja Nassor, CHF Beneficiary





# Advancing Health Technology Management in Tanzania

In 2011, Tanzania grappled with significant Health Technology Management (HTM) issues. Inefficient infrastructure and equipment management, coupled with a lack of systematic planning were primary concerns. Managerial skills were absent at various health system levels, impeding documentation, planning, and budgeting for equipment maintenance. A shortage of trained technical staff, including engineers and technicians, exacerbated the situation. Responsibility for medical equipment maintenance fell primarily on health facilities, leading to suboptimal management, inadequate repairs and a lack of a comprehensive inventory.

## Pilot reform in Dodoma Region (2011-2018)

The HPSS project initiated a pilot reform in Dodoma Region guided by four key principles:

- Alignment with Tanzanian HTM policy and regulations
- Utilisation of all available maintenance resources
- Integration of infrastructure and medical equipment maintenance
- Adaptability, scalability, and sustainability

## Key interventions and notable achievements

Key interventions included conducting an infrastructure and medical equipment inventory, reforming the HTM human resource sector, establishing maintenance infrastructure, and fostering policy dialogue and collaboration. The pilot reform achieved significant success, notably enhanced inclusion of technicians, increased inspection rates, development of maintenance plans and budget allocation for maintenance. However, persistent challenges remained, including incomplete data entry, resource allocation issues, and limitations in personnel recruitment.

## National rollout:

### Momentum in implementation

The national implementation of HTM innovations gained momentum, marked by essential milestones such as the establishment of maintenance workshops in various regions, introduction and accreditation of a training programme for biomedical technicians, enhanced human resource capacity with the employment of biomedical technicians and engineers by districts and regions, and the development and deployment of a National Calibration Centre.



## Integrated approach

The decade-long HPSS project serves as a testament to the value of an integrated, systems strengthening approach to HTM. Building technical capacity, introducing training programmes, establishing repair workshops, and developing IT systems led to tangible improvements in the availability and operability of health technology. Additionally, cost savings through equipment repair were realised.





### Promising prospects

The national rollout holds promise for further strengthening HTM in Tanzania, with milestones such as the National Calibration Centre and regional maintenance workshops. Overcoming challenges at both the technical and political levels and enhancing coordination capacity are critical for successful implementation and sustainability. The ultimate success of the HTM component hinges on increased government commitment at the policy and funding levels, ensuring a healthier and more efficient healthcare system for Tanzania.

### **Digital innovations: from openMEDIS to MEIMIS**

In support of the government's plan of using digital solutions for their health system's management, HPSS helped with the setup of openMEDIS and introduced it to be used as an inventory management system for medical equipment and building infrastructure. openMEDIS was later transitioned into the broader IT system for inventory management, the Medical Equipment Maintenance Information System (MEIMIS). It provides centralised information to the government on which equipment is in use at which health facility and on its state of function or need of repair. It supports the management of spare parts and facilitates decisions about investing in new medical equipment.

### **HTM's key achievements**

- Computerised inventory and equipment system: A digital tool (MEIMIS) for managing medical devices, spare parts and consumables
- Health equipment workshops: 5 district and 4 regional workshops to maintain and repair equipment
- Full equipment cycle model: A plan for managing medical equipment from procurement to retirement
- National Calibration Centre conceptualised and established
- Human resources development: A national technical level training developed and accredited, with capacity of training 100 artisans annually
- Cost savings through repair of biomedical equipment rather than replacement



# Health Promotion: A Holistic Approach



*“Health promotion activities have led to communities being better informed about certain diseases and how to prevent them.”*

## **Achievements of HPSS**

- 154 sessions of school health screening: 90,000 school children with oral, eye, ear, worm and parasite examination
- 2,500 pupils referred to specialist services
- Improved school hygiene and sanitation led to a reduction of diarrhoeal infections
- Implementation of health committees based on sanitation action plans
- Over 150 Sanitation Revolving Fund established in 130 villages
- More than 67,000 new public and domestic latrines built

## **Health Promotion: A holistic approach**

Health promotion is a comprehensive, participatory concept that empowers individuals to take control of their health. The HPSS project embraced this holistic approach, transcending traditional methods of distributing posters and leaflets.

## **Empowering communities**

HPSS focused on strengthening community-driven health actions and mobilizing government resources to support these initiatives. The project believed that participatory health promotion would equip communities with knowledge and tools to address their health and well-being needs more effectively.

## **Collaborative efforts**

HPSS fostered collaboration among government and civil society actors in health, education and community development. This collaboration aimed to coordinate health promotion activities across sectors. Communities were actively involved in prioritising health concerns, planning interventions, identifying resources and implementing activities. Notable initiatives included community sanitation projects and school health promotion.

### Early detection and education

Crucially, the project incorporated school-based health screenings as a fundamental component of its health promotion activities. Recognising that communities often seek healthcare only when they are unwell, these screenings aimed to detect health issues early. This proactive approach prevented children from missing school due to illness and contributed to better academic performance.

### Enhancing school hygiene and sanitation

One significant achievement of the HPSS project was the marked improvement in school hygiene and community sanitation in the Dodoma region through health promotion. This approach led to a noticeable reduction in diarrheal infections among students and contributed to overall better health outcomes. The project facilitated the formation of health committees, which collaborated with students and the local community to create sanitation action plans.



### Promoting local economic development

Furthermore, numerous new public and domestic latrines were constructed. Over 150 Sanitation Revolving Funds (SRF) were established in 130 villages, leading to upgrades of various sanitation facilities. Notably, this effort had a dual impact on both public health and local economic development. Local artisans were engaged in designing and manufacturing toilet slabs and constructing latrines, driving economic growth within the communities. This integrated approach reflected the project's dedication to enhancing community well-being and prosperity.

### Capacity building

To implement this innovative health promotion approach, HPSS invested in building the skills of facilitators. The project developed practical training modules for health officers, community officers and school health coordinators, transforming them into master trainers. These master trainers then cascaded their knowledge to their peers, creating a cost-effective knowledge-sharing network.

### Sustainable expertise

To ensure the continuity and expansion of expertise, HPSS developed courses and trained lecturers as part of a specialized and accredited health promotion course at the University of Dodoma. This institution now leads in teaching health promotion and extends expertise to other training centers throughout Tanzania.

### Policy support

Recognising the need for a policy framework to back community health actions, HPSS supported the government in developing health promotion strategies. These efforts resulted in the establishment of essential policy guidelines, including the National Health Promotion Policy Guidelines.





*“The HPSS project has proven to be a most valuable component of our partnership with the Tanzanian government to reform the health sector and increase access to quality of health services for rural populations, leaving no one behind.”*

Didier Chassot, Ambassador of Switzerland to Tanzania