



Developing Training Systems for Health Workers in Bangladesh









Case Study Number 5

Implemented by





Funded by









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The Katalyst Cases

Number 5

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THE SPRINGFIELD CENTRE





Preface

The context

Health is a core dimension of poverty. Bangladesh has had some exemplary successes in the healthcare sector in recent years, such as the reduction of maternal and infant mortality rates, the widespread implementation of family planning programmes and increases in child immunisation. However, the overall quality of healthcare is low and the ability of the general population to access services is inadequate, inhibiting the economic development of the country. Persistent health concerns hit the poor particularly hard, absorbing their limited resources, reducing their productivity and compromising their ability to move up the economic ladder, trapping them in poverty.

The project

Katalyst is a market development project, striving for poverty reduction. In its first phase (2003-2008), Katalyst helped to create more than 180,000 jobs and helped 700,000 farmers and enterprises to secure higher incomes. The target for the second phase (2008-2013) is to stimulate an additional net income of USD280m for 2.3m farmers and enterprises. As of June 2011, Katalyst has reached more than 1m people, helping them to generate an additional income of USD133m.

The project is implemented by Swisscontact (Lead Manager) and GIZ International Services under the Ministry of Commerce of the Government of Bangladesh. Katalyst is jointly funded by the Swiss Agency for Development and Cooperation (SDC), the UK Department for International Development (UKaid), the Canadian International Development Agency (CIDA) and the Embassy of the Kingdom of the Netherlands (EKN).

The case studies

Katalyst has prepared a series of case studies to share with the wider development community about what we do, why we do it, how we do it and the impact we have achieved. These case studies illustrate the potential of the market development approach and the challenges faced in its implementation. As for any sector in which Katalyst works, the primary reason for working in the healthcare sector was its relevance to the poor. We identified the underlying causes of poor healthcare services in Bangladesh and addressed them through interventions designed to bring about sustainable solutions. This case study shares our experience - and that of our partner RTM International - in developing a training system for healthcare professionals in Bangladesh from 2005 to 2010. It demonstrates that the conventional thinking about the role of the public and private sectors in healthcare needs to be revisited, concluding that poverty reduction can be achieved more effectively if both work together. It also shows that the market development approach can be applied successfully in 'non-traditional' sectors.

I greatly appreciate the hard work of our healthcare team in designing the strategy, implementing interventions and achieving results. I would like to thank Matthias Herr of the Springfield Centre who is the main author of this case study. Special thanks also go to Nusrat Nahid, Afrin Islam, Zannatul Ferdous and Muaz Jalil of Katalyst and Dr. Ahmed-Al-Kabir, Farhtheeba Rahat Khan and Md. Nazrul Islam (formerly) of RTM International, who have made valuable contributions to its preparation.

Goetz Ebbecke General Manager, Katalyst



List of abbreviations

AIMS Asian Institute of Management Sciences

BAMI Bangladesh Association of Medical Institutes

BSc Bachelor of Science

BTEB Bangladesh Technical Education Board

CME Centre for Medical Education

DNS Directorate of Nursing Services in the MoHFW

GDP Gross Domestic Product

HNPSP Health, Nutrition and Population Sector Programme

HT Health Technologist

M4P Making Markets Work for the Poor

MAT Medical Assistants' Training

MBBS Bachelor of Medicine and Bachelor of Surgery (Doctor of Medicine)

MFI Microfinance Institution

MoHFW Ministry of Health and Family Welfare

NGO Non-governmental Organisation

NIPORT National Institute of Population Research and Training

PPI Progress out of Poverty Index

RTM Research, Training and Management International, Katalyst's partner

SMF State Medical Faculty

TMSS Thengamara Mohila Sabuj Sangha, a microfinance provider

ToT Training of Trainers

WHO World Health Organisation

Glossary of terms

Bigha An unit of land area, usually equivalent to 0.33 acre

Monga Seasonal food insecurity in specific parts of north-western Bangladesh

Parishad A council or assembly (e.g. upazila parishad)

Upazila A sub-district of Bangladesh



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1. Why Katalyst intervened in the healthcare system

Katalyst is a multi-donor poverty reduction programme in Bangladesh. It tries to stimulate systemic changes that bring about large-scale, sustainable benefits using a 'Making Markets Work for the Poor' (M4P) approach (see *Annex 1*). It works in sectors that are important for poor men and women - as producers, workers or consumers - where there is potential for significant, inclusive change.

This case study describes the experience of Katalyst and its partner RTM International in improving the healthcare system in Bangladesh between 2005 and May 2010.¹ But how did a programme focused on sectors such as agricultural inputs, fisheries or furniture come to intervene in healthcare? And what value could Katalyst add to the sector given the significant attention it has already received over decades - and continues to receive?

1.1 The poor in the healthcare system in Bangladesh

In 2004, Katalyst conducted a market analysis of the healthcare sector. It wanted to understand the position of the poor within the healthcare sector, and how they were disadvantaged by this. Katalyst then used this analysis to determine the potential and scope for it to intervene in the healthcare system.

Health outcomes are low in Bangladesh, especially among the poor

Health is a major priority for government and development agencies, not only in Bangladesh, but worldwide.² In Bangladesh health has, in some ways, improved in recent years. Life expectancy has risen, maternal and infant mortality have fallen, immunisation rates are higher and the country is on the verge of eradicating polio.³ Yet when Katalyst entered the sector, the overall level of health was, by international standards, low (see *Table 1*). The WHO has warned of continuing threats such as HIV/AIDS, malaria and tuberculosis and the emergence of non-communicable diseases as a result of urbanisation and lifestyle changes.⁴

Table 1: Selected health indicators for Bangladesh and selected Asian countries (2005/6)

Health indicator	Bangladesl	n India	Thailand	Sri Lanka
Life expectancy at birth	64	64	70	75
Maternal mortality ratio (per 100,000 live births)	570	450	110	58
Under-five mortality rates (per 1,000)	69	57	7	11
Incidence of tuberculosis (per 100,000 population	n) 225	168	142	60
Total fertility rate (births per woman)	2.9	2.5	1.8	1.9

Source: World Development Indicators, 2008.

Low general levels of health undermine Bangladesh's development. The poor are particularly vulnerable to illness, further inhibiting their capacity to climb out of poverty. For Katalyst the prevalence of poor health indicated that the potential for large-scale impact on the 'economically-active' poor was significant.

¹The initial sector study commissioned by Survey Research Group of Bangladesh (SRGB) was conducted in August 2004; the first co-facilitation contract with RTM International was signed in April 2005; the project completion report was submitted in May 2010. However, interventions effectively stopped in late 2009.

²Health is regarded as a fundamental human right by the United Nations, is the subject of three of the eight Millennium Development Goals (MDGs) and more generally is seen as critical in developing competitive economies - healthy people are more productive; healthier places attract investment and economic activity. In Bangladesh, the significance of this is reflected in the large number of organisations and initiatives focused on health, and in the scale (and complexity) of healthcare activities, including the government's 'Health, Nutrition and Population Sector Program' (HNPSP).

³WHO 2009 Health Bulletin for Bangladesh, cited on the WHO Bangladesh website (www.whoban.org) under 'Country Health Profile.'

⁴WHO Country Cooperation Strategy 2008-2013 for Bangladesh.



Healthcare services failing to serve the poor as 'consumers'

Poor health is - in part - the result of a poor healthcare system. The WHO has ranked Bangladesh's healthcare system 131st out of 191 countries (and 181st in relation to the system's distribution responsiveness, a measure of social exclusion).⁵ The rural poor in particular lack access to appropriate healthcare services. But access is not the only problem: the quality of healthcare is also low. Those that can afford it seek treatment abroad, especially for major operations. The poor do not have that option, often relying instead on under-qualified or unqualified medical practitioners, such as owners of pharmacies and dispensaries and traditional healers.

Few opportunities for the poor as workers in the healthcare system

Katalyst also took the unusual step of looking at the potential for the poor to gain additional income and employment creation in the healthcare sector, in line with Katalyst's market development goals. Various national level studies confirmed an acute shortage of skilled health workers in Bangladesh, particularly in the lower and mid-level health professions. It has been estimated that Bangladesh would require an additional 280,000 nurses and 483,000 health technologists to meet international standards.⁶ These professions are vital to rural healthcare provision and - saliently for Katalyst - are of particular interest to young job-seekers from low and mid-level income backgrounds.

In spite of these shortages, back in 2004-05 there were limited opportunities for young people to take up a health-related profession. Programme has been undertaken and trained many healthcare workers, but this had not solved the underlying problem: a fundamental failure in the labour market to respond to demand from the healthcare system for skilled workers.

1.2 Rationale for Katalyst intervention

Katalyst concluded that there was significant potential for it to intervene in the healthcare system:

- Relevance to the poor: healthcare is a sector of national significance. Large parts of the
 population, in particular lower income quintiles, were affected by poor health outcomes and
 remained underserved by the formal healthcare system. In other words, the healthcare system
 was relevant to the poor as consumers. Also, given the shortage of skilled labour needed to
 supply more and better services, there was significant potential for pro-poor income and
 employment creation benefiting the poor as workers.
- Pro-poor growth potential: Katalyst's analysis found that the private sector was playing an
 increasingly important role, not only in providing healthcare services, but also in performing
 other essential functions. Growing investment and an influx of foreign firms (such as hospitals
 from India) demonstrated the attractiveness of the healthcare market to the private sector.
 Katalyst believed that this growth could be leveraged towards improved pro-poor outcomes.

The rationale for intervention was clear and corresponded with the programme's overall theory of change (route to poverty reduction, see *Figure 1*).⁷ Given that the poor participate in the healthcare system both as consumers and workers, a two-pronged poverty reduction objective was defined.

First, to reduce the barriers that Bangladeshis from poor and lower-middle income backgrounds face when seeking to work in the healthcare sector. Second, to improve poor people's access to healthcare services, and the quality of those services.

⁵Distribution responsiveness measures whether there are any specific social groups in a country who face worse health system performance with regard to any of the aspects of the health system. This looked in particular at seven elements of responsiveness: dignity, autonomy, confidentiality, prompt attention, access to social support networks during care, quality of basic amenities and choice of care provider. For more information see World Health Report (2000): *Health systems: improving performance*, Geneva.

⁶Bangladesh Health Watch (2007): The state of health in Bangladesh 2007 - health workforce in Bangladesh, BRAC University, Dhaka.

⁷See Katalyst (January 2011): Strategy Brief. Available at www.katalyst.com.bd



More income and job opportunities for the Poverty reduction poor in **Improved** healthcare Systemic health sector Health system intervention performance change and growth Better access to quality health services for the poor

Figure 1: Katalyst's overall route to poverty reduction (health)

Katalyst believed it could add value by introducing its systemic approach to market development into a new field at an opportune juncture. A failure to improve the quality of and access to healthcare services in Bangladesh had prompted a re-appraisal of how healthcare services should be provided, including the respective roles of the public and private sectors and also the efficacy of donor-funded support.⁸

2. From healthcare to training: understanding the nature of the problem

In order to apply a systemic approach to the healthcare system, Katalyst needed to gain a good understanding of how the healthcare market really operates, and how these 'market realities' affect the poor. The challenge at the outset was to determine, given the many problems affecting the sector, where it would make most sense for Katalyst to intervene. Katalyst assessed its options based on (a) its prospects for large-scale, sustainable impact and (b) its own expertise and experience as a market development facilitator. This required a diagnostic process that sought to distinguish symptoms of the system's under performance from their root causes, so that Katalyst could focus on the latter. This chapter sets out that process.

2.1 Symptoms of underperformance: poor access to, and quality of, healthcare services

In its first analysis of the healthcare system in 2004, Katalyst tried to gain an understanding of its structure, performance, trends, constraints and opportunities. A better understanding of the position of the poor and the nature of their exclusion was of particular importance.

The key findings - building on studies conducted by other organisations - confirmed that the outreach of healthcare services in Bangladesh was poor, and where people did have access to them, the quality of services raised serious concerns. As per the WHO ranking, large parts of the population - especially in rural areas - had little or no access to appropriate health services.

⁸For example: WHO (2008): World Health Report, page XIV; WHO (2007): Everybody's business - strengthening health systems to improve health outcomes; Bloom G. (2008): Making health markets work better for the poor - improving provider performance, Future Health Systems.



Low access and quality were symptoms of more deep-seated failures:

- Low resource allocation: national health expenditure (both public and private) was 2.8% of GDP in 2005, equivalent to USD12 per capita per year, far below the average of 4.5% for South Asia.9
- A focus on (weak) public sector health services: many public health services were dysfunctional - witnessed, for example, by the high rates of absenteeism at government health centres. Most of the population relied on private health services. Despite this, most development initiatives focused on the public sector healthcare providers.
- Poor quality of private sector services: the majority of the population 75% in rural, 84% in urban areas relied on private, small, informal healthcare service providers. Most of these providers (often running unregulated pharmacies) were semi-skilled with no professional training. Misdiagnosis and wrong treatments were common, further undermining service quality and consumer confidence.¹⁰

In 2003, the World Bank concluded that the "government's focus in the health sector has largely been on the establishment of facilities and services in the public sector. A majority of contacts between people seeking health care and providers, however, takes place in the private sector. It would seem obvious that addressing the sector's problems requires the institution of appropriate public policies to enhance the effectiveness of the private sector's contribution to public health goals."

The same study indicates that the poorest income quintiles rely on private healthcare services far more than higher income groups do. As a result of the poor quality of these service providers, health outcomes differ greatly between the poorest and richest income groups (67% of children aged twelve to twenty-three months from the richest quintile received all vaccinations compared to only 47% for the poorest quintile). 12

2.2 The immediate cause: shortage of a qualified workforce

The findings of its initial analysis prompted Katalyst to explore further the immediate causes of the healthcare system's dysfunctionality. The availability of affordable drugs, healthcare providers' and consumers' access to information, the capacity and the incentives of the public sector and other players were all identified as important constraints. However, one crucial problem at the heart of the system's malaise lay, clearly, in the labour market: the severe shortage of appropriately-trained personnel. While this shortage included doctors, it was most pronounced for other professions:

- Nurses: mostly employed by hospitals and clinics for patient care purposes and in assisting doctors and other higher level professional staff;
- Health technologists: specialists (e.g. laboratory, radiography, dentistry, physiotherapy, pathology and pharmacy technologists) employed by hospitals, clinics and diagnostic centres;
- Paramedics and community health workers: a range of health workers, including midwives, skilled birth attendants and actual paramedics employed by rural clinics, NGOs and health programmes, or self-employed e.g. as pharmacists;
- Medical assistants: employed to assist doctors in public (especially rural) healthcare facilities;
- Family welfare visitors: mostly employed by Government Family Welfare Centres (at union and upazila levels) and NGOs to provide clinical family planning services in communities.

⁹World Bank (2008): World Development Indicators, Washington D.C, p.94.

¹⁰ For more information on private healthcare services in Bangladesh see: World Bank (2003): *Private sector assessment for health, nutrition and population (HNP) in Bangladesh*, Washington D.C. Future Health Systems (2008): *Health seeking behaviour in Chakaria*, Research Brief, Issue 1 September Dhaka

¹¹World Bank (2003) *Private Sector Assessment for Health, Nutrition and Population (HNP) in Bangladesh,* Dhaka, pp. i-ii.

¹²BCG, DPT, oral polio, measles.



The problems in Bangladesh's healthcare labour market manifested themselves in several ways:

• Insufficient coverage: Bangladesh had a very low number of health workers. The shortage was especially acute for nurses where, compared with international norms, Bangladesh had only 10-25% of the number required (see *Table 2*).

Table 2: Health workers per head of population (in '000s) (2006)

Country	Nurses	Midwives	Pharmacists	Community health workers	Lab technicians
Bangladesh	0.14	0.18	0.06	0.31	0.03
India	0.80	0.47	0.56	0.05	0.02
Pakistan	0.46	-	0.05	0.42	0.06
Sri Lanka	1.58	0.16	0.06	-	0.07
Low income countries	1.32	-	-	-	-
Middle income countries	2.78	-	-	-	-

Source: WHO (2006): World Health Report and World Bank (2003): Private sector assessment for health, nutrition and population (HNP) in Bangladesh, report no. 27005-BD.

- High absenteeism and vacancies: staff absenteeism at public facilities, particularly in rural
 areas was a severe burden. Vacancies often went unfilled, partly due to ineffective government
 recruitment procedures, but primarily due to a lack of qualified workers.
- Lack of qualifications: only 5% of Bangladesh's health workers had any formal health qualification; for para-professionals (e.g. medical assistants) the figure was only 0.68%. The rural population largely dependent on an informal system of traditional healers, unqualified practitioners and drug vendors as a first level of healthcare advice.
- Rural-urban divide: 75% of the population was rural, but only 20% of the health workforce was located in rural areas.

While other problems impinged upon the healthcare system, the labour market was central to its performance and therefore to future solutions. Overcoming labour market constraints was also a logical focus for Katalyst, because the huge, unmet demand for skilled health workers suggested significant potential for income and employment creation. A focus on the lower and mid-level health professions made particular sense: while doctors prefer to work in urban areas and often seek permanent employment abroad, health workers in these professions tend to stay in rural areas and often come from less well-off backgrounds.

2.3 The real issue: a training system that does not deliver

Within this general labour market focus more specific questions remained. Why did shortages persist? Why hadn't the supply-side responded to demand for more and better health workers? What were the underlying causes of the labour market's underperformance, which prevented young people, especially from poor backgrounds (the bulk of the labour force), from entering the sector?

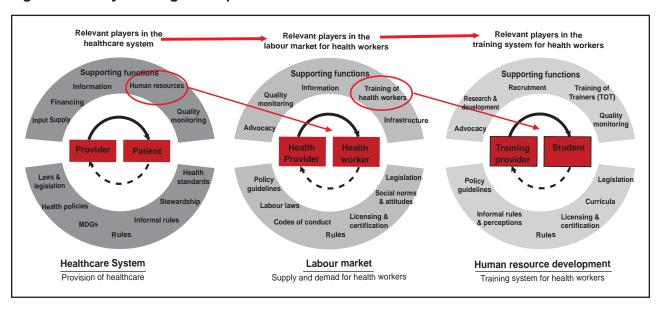
Answering these questions led Katalyst to look at the training system that 'produces' health workers. In other words, the programme shifted its focus from the healthcare system, to the labour market for health workers, to the training system (see *Figure 2*) - and to the specific question: why wasn't the training market system working?

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¹³ Bangladesh Health Watch (2007); Ibid.



Figure 2: Katalyst's diagnostic process



The training system for health workers in 2004-05

Closer analysis showed that, while the training system for each of the main categories of workers shared common features, each had many discernible differences. In reality, there were a series of related training systems rather than a single system. Paramedics and community health workers, for example, were 'professions' largely created by NGOs. Training was mainly provided by NGOs, without regulations or quality control. Medical assistants and family welfare visitors were primarily trained by government. The training systems for the two most prominent professions, nurses and health technologists, are presented in *Annex 2*, which identifies key players and their roles, and prevailing problems and their causes.

Table 3: Courses offered for lower and mid-level health professions in 2004

	Graduate courses	Diploma courses	Certificate courses
Profession	Nurses	Nurses, health technologists and medical assistants	Paramedics, family welfare visitors
Characteristics	 1 year BSc degree Requires completed diploma and at least 1 year's work experience Offered by only 1 institute, under Dhaka University 	 3 - 4 years duration Offered by public and private institutes registered under the BTEB and the SMF 	 1 - 2 years duration Offered by NGOs, private and public institutes (mostly without proper affiliation however)

Despite notable differences in how the various health professions received their training (see *Table 3*), the number of students enrolling in these programmes and the quality of the trainees was a matter of concern in each.





The root causes of underperformance in the training system

Although the training systems for each of the health professions involved different players and institutional frameworks, Katalyst's analysis showed that weaknesses in each of these training systems had common roots. These lay generally in the combination of inappropriate regulations, guidelines and attitudes, poor coordination and weak capacities - all creating an ambiguous environment that compromised quality and undermined the further development of more and better training. More specifically, the following constraints were common and set the agenda for Katalyst's interventions:

A public-centric view of training: the training system for health workers reflected the ethos that the delivery of healthcare services was the sole responsibility of government, although it was beginning to experience more interest from private sector providers (see *Box 1*). Despite obvious facts - that public organisations were simply not delivering and that a substantial but often poor quality and badly-guided private sector was 'there' - there was little recognition of the need for a more pluralistic system. Underpinning this view was suspicion among many government officials towards the private sector and the resultant disapproving signals emerged from these attitudes (see *Box 3*).

Box 1: Emerging and diverse private sector training providers

Who are private sector health training providers? What do they look like and what are they interested in? This is an evolving and disparate picture. It includes international health and education organisations and local small firms run by Bangladeshi entrepreneurs. It includes forprofit and not-for-profit organisations (although in practice there is a large 'grey' area of overlap between profit and not-for-profit, in terms of motivations, structures and modes of operation). These are two examples of the diversity of new providers in Bangladesh:

Established in 2002, the **State University of Bangladesh** is one of the new generation of large-scale private universities in Bangladesh. Accredited by the University Grants Committee and approved by the Ministry of Education, it has fourteen different academic departments focused on sciences, health, business and social studies. It has over 3,500 students (including a small number from neighbouring countries). Nursing is a recent addition to the university's portfolio; a four-year BSc was first offered in 2007 and 50 students were enrolled. The campus is located in Dhaka and caters to students mainly from urban and semi-urban areas of the country. The complexity of the profession and the demanding entry requirements mean that only large organisations with close links to health providers can provide training. The American International University is another key provider.

At the other end of the spectrum is the **NewLab Institute of Medical Technology.** This is a private institute approved by the MoHFW, the SMF and Bangladesh Pharmacy Council. A non-profit organisation established in 2005, it offers three-year diploma courses in laboratory medicine, dentistry and pharmacy; 80 places are available in total. The campus is located within the urban area of Dhaka, but it admits students from urban and rural areas. The admission fee for the courses is USD520 (BDT40,000) and the monthly tuition fee amounts to USD16 (BDT1,200) on average. Many health technology providers are small-scale operations (offering, for example, laboratory, dentistry, radiology services etc.) because the barriers to start-up are relatively low. NewLab is a provider of these services and so is able to recruit trainees for its own activities as well as to supply this growing number of small-scale health centres.

Inappropriate government regulations and guidelines: the regulatory environment was dysfunctional in three respects. First, there was no general policy decision allowing the private sector to operate in the training market (i.e. no policy specifically recognised this as a 'good thing'). Second, criteria for the admission of training providers and the framework within which they had to operate were not defined. Third, modern, standardised curricula and examination procedures, outlining minimum teaching requirements, did not exist. The curriculum for the nursing diploma, for example, had not been changed since 1954.



Box 2: Inter-ministry rivalry undermines the training market

In 2005, government's lack of overview and coordination in the training market for health technologists came to public attention in dramatic fashion. The Bangladesh Technical Education Board (BTEB), an agency of the Ministry of Education, registered 69 health technology institutes (despite 31 being dysfunctional), believing that this was within its remit. They did so, however, without consulting the health ministry (the MoHFW).

Aware that the BTEB had no medical expertise to develop curricula, and viewing its involvement as an unwelcome intrusion on to health 'turf', the MoHFW reacted vigorously. Through its own agency, the State Medical Faculty (SMF), it took out advertisements and held news conferences, declaring publicly that diploma courses in the health arena provided under the BTEB were illegal and that graduates from those institutes would not be given permission to practice in public health facilities. It did so, however, without any curricula of its own or clear regulations for the admission of private providers (and moreover, courses run in the two government institutes were outdated).

The inter-ministry conflict created an environment of damaging uncertainty, both among training institutes regulated by the BTEB, and their 6,000 students. Indeed, their association, the Bangladesh Association of Medical Institutes (BAMI), filed a court case (unsuccessfully) against the SMF to try and bring clarity to the situation. In this context, Katalyst's intervention aimed to bring about greater coherence to government's role in the market.

 Limited capacity and coordination in government: the government's ability to provide appropriate guidance and stewardship was undermined by several factors. First, frequent staff rotation exacerbated capacity constraints. Second, the institutional architecture was characterised by overlapping responsibilities and confusion of roles. Third, there was limited coordination between institutions.

Box 3: A classic public-private divide in health training

The health technologist training market in 2004-05 represented an archetypal case of a market system *not* delivering.

Government's prevailing view was that the only 'proper' provision could be made by the public sector. Private players were untrustworthy and did not care about the contribution training could make - as long as it made them money. Government disapproved of them and largely kept their distance.

The *private sector,* for their part, saw public providers as inefficient and unmotivated - and government overall as adding little value. They wanted consumers (students) to make choices and government to keep out, allowing them to grow without unhelpful interference.

With each side in their 'entrenched positions', the result of this division was a dysfunctional market system. Government did not have the resources or management culture to be an effective, large-scale provider. But consumers - without information or standards - had no sound basis for making decisions over the value of private sector training. So providers had few incentives to offer good quality training. The externalities emerging from this for Bangladesh as a whole - bad health services and poor health - were unchecked.

What was clear to Katalyst was that the problems of health technologist training lay in the system as a whole - and that solutions had to be equally systemic.

Demand-side doubts: potential trainees were deterred from choosing healthcare as a career.
 They were often unaware of potential employment and income opportunities in healthcare (it being perceived more as a social service) and the dominance of public training organisations



hid the availability of private sector training providers and careers. Furthermore some professions suffered from discouraging social attitudes (see *Box 4*).

Box 4: The stigma around the nursing profession

Nursing in Bangladesh is predominantly a female profession. In general, however, becoming a nurse was not seen as an attractive employment opportunity by young people in Bangladesh. Nurses complained that they were treated disrespectfully by their peers and society at large, that their opinions were largely ignored and that doctors in the past were all too happy to use unqualified nurses.

These negative perceptions were reinforced by a gender-specific social prejudice. Given its nature - contact with strangers, night duty and involvement in 'dirty' work - nursing was frequently looked down on (and even associated with commercial sex). As a consequence, women's value on the 'bride market' often decreased when they were involved in nursing.

Beyond these social attitudes towards nursing (and some suggestion that these were changing), three specific factors were still problematic. Nurses were classified only as "class II non-gazetted officers" in the government hierarchy, whereas doctors were class I. Second, the curriculum used to train diploma nurses dated back to 1954 and lacked serious modernisation on critical issues. Third, mid-level medical professions in general were seen as a social service rather than a serious career or source of employment and income.

The social stigma around nursing is one reason why Bangladesh has lagged behind international standards in nurse to population ratios (see *Table 2*).

- Supply-side failings: private providers often lacked important practical capacities in relation to administration and marketing. Their links with government were often weak and undermined by lack of a collective voice. Providers found it difficult to recruit competent teaching staff, in part reflecting the absence of any strong capacity-building role in the training system.
- Fragmentation of the training system: the involvement of development organisations in the training system had been and continues to be significant. Short-term needs for skilled personnel have been addressed by direct training, to meet immediate programme objectives. This has not solved the long-term challenge of a more effective training system. Without this, the achievements of any health programme are likely to be fragile, as the training provided by development organisations is time-bound and programme-specific. The WHO has been critical of this type of response, claiming that it has led to a fragmentation of healthcare systems the establishment of parallel systems. This can be observed in Bangladesh: the indigenous training system and the ability of government to provide stewardship has been undermined by training programmes conducted by development agencies, often without official recognition and quality standards. Once trained, participants have been offered few prospective employment opportunities beyond the life of the development programmes, as their training is not recognised by others.

Given these constraints, the focus of interventions became clear for Katalyst. First, it had to address the range of 'soft' attitudinal and 'hard' formal regulatory barriers that prevented a more conducive environment for training from developing. Second, it had to focus on the more specific issues impinging on training supply and demand. In doing so, the challenge for Katalyst was to avoid exacerbating the fragmentation of the training system, and lead it instead towards further integration.

2.4 Vision and focus of Katalyst interventions

Katalyst now faced the challenge of what to do. Where in the training system could it find leverage points to address these systemic constraints? Which stakeholders should it work with in order to have the most impact? Katalyst was guided by three key factors:

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¹⁴ World Health Report 2007.



- (a) A vision of a more pluralist training market system in which private (and public) providers offered more and better training in an environment of appropriate regulatory guidance and oversight from government, standardised and modern curricula, constructive relationships and attitudes, and stronger capacity building.
- (b) A focus on health professions that would be of particular relevance to young people from lower income family backgrounds, and people from rural areas more generally, offering new prospects for employment and additional income, and addressing the paucity of qualified labour.
- (c) Recognition of the need to act in a flexible and entrepreneurial manner while still being consistent with its vision. In a highly politicised sector, this meant being attuned to the incentives and capacities of stakeholders and adapting its approach where necessary to accommodate these.

Building on its overall impact logic (see *Figure 1*), the logical model for Katalyst's interventions is depicted in *Figure 3*.

Figure 3: Katalyst's vision and logical model

Systemic interve	ention System o	hange Impr	oved performance	Final goal	
	Training	system			
Interventions in relation to:	Better functioning training system	Better provider performance	Labour market	Healthcare	
Regulatory change	Improved regulations				
		More good		Better access	
	More relevant curricula	quality training providers		to health services	
Curricula			More and better		
change	More positive attitudes		quality health workers		
			Wellerd		
New training courses	New programmes	More good quality trainees		Increased income and job	
				opportunities	
	New capacity development				



3. How Katalyst facilitated change in the training system for health workers

Katalyst's vision of change resulted from a diagnostic process in which several studies of the health sector and for specific health professions in the labour market were conducted. A broad direction became clear soon after Katalyst started exploring the sector, but the details of intervention design were the result of direct engagement with stakeholders in the sector, often based on trial and error. This reflected Katalyst's general approach: a clear overall objective and strategy focused on pro-poor systemic change, but flexibility in the tactics of how this is achieved.

This chapter describes what Katalyst actually *did* to facilitate change in the training system. This was a process of engagement stretching over a period of five years, a process which was complex in terms of partnerships, actions taken and overall progress. Necessarily therefore, the process has been simplified here in order to convey the essence of Katalyst's facilitation approach.

3.1 The facilitation process

Katalyst and RTM International worked together closely (see *Box 5*), from carrying out initial market assessments to intervention design and implementation. This process led them to examine a number of training systems, starting with nurses, then paramedics and health technologists and other

occupations. Katalyst and RTM (henceforth referred to only as 'Katalyst') collaborated around three related areas of intervention:

- Regulations and guidelines: the challenge here was to reform regulations to allow more private providers to enter the market for training services, while ensuring an appropriate level of government scrutiny. Interventions focused on lobbying, technical assistance, direct contracting of market players to undertake tasks and facilitating dialogue.
- Course curricula: using a similar approach as that employed in regulatory reform work (with which it is closely linked), revision of course curricula was essential to make them more relevant and modern, offering the right type of training for the needs of the workforce.
- New programme development: the paramedic discipline was especially undeveloped and 'scattered'. In order to provide an impetus for better practice and improved regulation, one 'market leader' was supported to develop a new community paramedics course with a view that this would lead to 'crowding-in' thereafter.

Box 5: Working through a reliable partner: RTM International

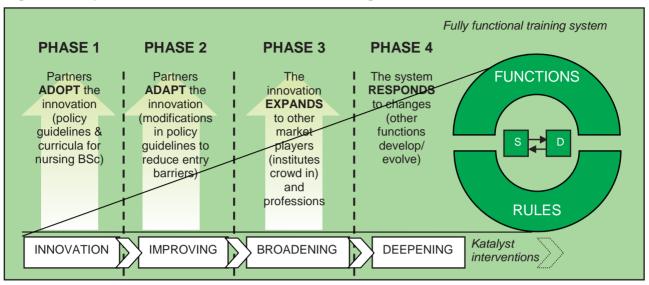
Given the complexity of the healthcare system, and the fact that Katalyst had no specialised expertise in healthcare, it had to rely on a credible implementing partner that could provide detailed in sights into the healthcare system. It found such a partner in RTM International - an independent, not-for-profit organisation in the field of health and population services, with 15 years of experience in the healthcare sector working for clients such as UNICEF, WHO, EU, UKaid and USAID. RTM's mission is to improve health and education services to the poor and underserved by means of capacity development, research and consultancy.

A number of factors made RTM an ideal partner for Katalyst: technical expertise in healthcare; a wide network of stakeholders in the sector; strong credibility based on good research, competent management and innovative ideas; staff from diverse professional backgrounds (crucial in understanding and adopting a more systemic approach to healthcare); and committed leadership. While this was a fee-paying assignment for RTM, it was also one which fitted with its perspective on the sector, and it allocated a multi-disciplinary team of five professionals to the task.



Although in reality implementation was not completely linear, the overall process can been seen as a broad sequence of phases (see *Figure 4*).

Figure 4: Sequence of intervention and market change desired



Note: 'S' Supply & 'D' Demand

Market analysis

The initial priority was to find out how specific training market systems were working - and more particularly, not working - effectively. Katalyst therefore conducted a number of studies to understand the overall healthcare system as well as the training systems in place for specific health occupations.¹⁵

A general assessment, *Private Healthcare in Bangladesh*, was commissioned. This was followed by more detailed analysis of training systems for various health professions (nurses, health technologists, paramedics etc.). Different dimensions of healthcare for the urban and rural poor were also investigated, together with public and private provider needs assessments and profiles of students and facilities.

In practice, analysis was continuous and Katalyst found that its own learning progressed quickly throughout the implementation process, through informal interactions with different players. However, formal analysis was also important for three reasons:

Advancing Katalyst's own knowledge beyond symptoms (where most studies stopped) to causes.

Establishing credibility among players: given the politicised nature of health and general resistance to change, a sound factual basis was crucial to lend weight to arguments and credibility to Katalyst. As Katalyst sought, through many individual meetings and roundtable discussions, to establish a 'bridgehead' with key players, especially in the public sector, research proved vital.

Providing a record of market change: once undertaken, data from studies was updated regularly, providing a 'living record' of the process of change.

¹⁵ A sector study was conducted by SRGB in 2004 on "Private healthcare in Bangladesh"; several market assessments were conducted on nurses, health technologists, paramedics and other professions.





Introducing the innovation

Katalyst began collaborating in early 2005 with some private institutes on the introduction of a nursing BSc course (these institutes had already trialled their own courses 'under the radar' of the government). A public-private dialogue emerged from these partnerships which led to the design of new policy guidelines and curricula. Once approved by the MoHFW and relevant academic bodies (after a dialogue process lasting three years), Katalyst supported few private institutes towards getting approval and permission for conducting BSc nursing course.

An initial focus on the private sector made sense for two reasons. First, new private sector interest - new hospitals, new training centres - was a source of dynamism in healthcare. The potential implications of and opportunities arising from this emerging force had to be understood, especially the incentives and capacities of those involved. Second, as a precondition of effective engagement with government, it was necessary to have specific 'hands-on' information about private sector issues (rather than loose, generic arguments).

Katalyst undertook a number of activities with the private sector. In nursing for example, initial work focused on the medical colleges of three private universities and included:

- Supporting the publication and media launch of a paper on Policy Advocacy for Certification of Nurses and Paramedics that argued for a Bachelor's degree in nursing and for private sector involvement in training for this.
- Supporting the development of private colleges' curricula and applications for approval to the MoHFW, and followingup on these. This push initiated a change process within the government.

Working with the private sector as an entry point to the system as a whole helped to create the 'raw material' with which to approach government and address some of the constraints in the regulatory environment. Shortly after these initial activities, government set up joint committees on regulatory reform, a process through which Katalyst helped the private sector to articulate its interests.

Learning from the pilot and improving

After the first institutes had been approved for the nursing BSc in late 2007, policy guidelines were revised in a second round of consultations between all stakeholders involved, facilitated by Katalyst. Entry barriers for the private sector (such as levels of deposits and hospital beds required¹⁶) were further reduced. Partnerships between institutes and hospitals were permitted. This phase also focused on strengthening relationships between players and clarifying their respective responsibilities, and continuing to build more conducive attitudes towards private sector involvement in training.

One obstacle for Katalyst to overcome was the general scepticism of government towards private sector involvement. In approaching government, Katalyst needed to understand and engage with the swirl of attitudes, incentives, relationships and power structures (official and unofficial) that made up the political economy around healthcare. This was particularly important in encouraging government into a more accountable and responsive relationship with the private sector.

Changing government perception involved a lengthy, often frustrating process (over two years) that required a high degree of persistence by Katalyst. Actions included making research findings available to officials, interacting directly (formally and informally) with key personnel, and round-table discussions, workshops and press conferences at which officials made public statements of support.

Katalyst had to work its way up and down the government hierarchy as officials would not make decisions without the consent of higher level authorities. Interaction was often informal and

¹⁶The government approval process usually stipulates that the applying institutes must have certain amount of financial capacity; thus they are required to show that they hold or have access to a specific monetary amount in fixed deposit bank account (e.g. the Health Technology guideline requires that the applying institute must show that it has BDT1 million in a fixed deposit account). Similar requirements are in place in regards to access to hospital beds.

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spontaneous and the process experienced several setbacks (often caused by frequent staff changes); all this allowed Katalyst to gain insights into the 'how to' of change within government. Katalyst did not use any formal tools (such as stakeholder analysis) for engaging with government players, but continually assessed the nature of different players' positions and employed considerable creativity in acting to bring change (see *Box 6*).

Box 6: Bringing change in creative ways

Stimulating change in government required creative and different ways of engagement, in both open and private discussions. Two examples in relation to nurses' training illustrate the point:

The public route: 'roundtable meeting', November 2004

In collaboration with the American International University (AIU) and the Daily Star newspaper, Katalyst organised a roundtable meeting at which government officials participated as well as private sector training institutions and other development partners. The organisers secured the participation of a key minister of the MoHFW, which obliged other top-level officials to attend as well.

During the event, AIU presented a paper outlining the current supply shortage of nurses, the need for a new BSc degree in nursing and the potential role of private sector training providers. Following this presentation, a top official of the MoHFW made a public statement of support, which was leading national newspapers the following day.

The private route: 'corridor diplomacy'

More than a year later, a committee of several government and private stakeholders had developed guidelines and curricula for nursing training. However, the process of gaining approval from the MoHFW was complicated and seemed destined to fail as officials were unable to make decisions without direction from higher levels.

In a last-ditch measure to bring things forward, Katalyst team members, knowing the office location and movements of the relevant decision-maker (a senior official), decided to wait for him in the corridor. When he arrived, they intercepted him, presented him with a file containing newspaper articles and pictures from the press conference, at which he had made the public statement of support. This resulted in a longer meeting to discuss the issue following which a directive was issued approving the policy guidelines and curricula for the nursing BSc.

Extending the scope to other health professions and encouraging crowding-in of more providers

Having demonstrated the importance of private sector involvement in the training system for the nursing BSc, Katalyst used this momentum to broaden the scope of its intervention to other health professions, in particular those that were significant for their provision of health services in rural areas, such as community paramedics, health technologists, medical assistants, community health workers and nursing assistants. This entailed new partnerships (for example with TMSS, a microfinance provider with healthcare facilities of its own, on paramedic and health technology courses) and a deepening of the relationship with the SMF as a regulatory body. Gradually, policy guidelines and new or revised curricula were produced and approved for a variety of other courses.

Most of Katalyst's work was focused on changing regulations, curricula and the attitudes impinging on the supply and demand of training. Katalyst also worked directly with training providers. The rationale here was that, even when the regulatory environment was more conducive, other problems might prevent an effective response from training providers. These might include uncertainty over processes, information gaps and lingering relationship frictions. Katalyst felt that it could not simply assume that competent providers would now flood into the market. It therefore decided to support the new arrangements in two ways:

A conference explaining the new measures: organised with the MoHFW, the purpose of this
was to inform training providers about the new curricula developed for different health
occupations, and the application requirements and procedures for providers wishing to register



to offer these programmes. These new rules represented a major change for providers and regulators alike.

Direct advice regarding the implementation of the new processes: information and advice was offered to providers as they applied to run the new programmes and to government staff as they sought to administer the new procedures. Katalyst actively followed up on individual cases to ensure that early 'teething problems' were overcome and applications proceeded without delay.

Other direct support for training providers was offered in exceptional circumstances. In particular,

Katalyst worked with TMSS, a microfinance provider based in Bogra. This had two aims. First, to support the further development of a microfinance product which had paramedic services embedded within it. Introduced earlier and covering around 10% of their **TMSS** clients, had recently received approval from the finance wholesaler, Palli Karma Sahayak Foundation PKSF, to reinvest profits in their new product. Second. from training а perspective, to support the development of a one-year training programme for paramedics and a training-of-trainers programme, which would allow TMSS to expand its coverage to its own clients and train trainers from other interested MFIs.

marketing support

Katalyst had initially believed that

Box 7: Doing something about inter-ministerial conflict

The conflict between the SMF (of the MoHFW) and the BTEB (of the Ministry of Education) (see Box 2) created many uncertainties in the training market for health technologists, with neither students nor institutes knowing what the future of the profession would look like and regulations governing the quality of training unclear. Given the lack of enough health technologists in the labour market, something had to be done urgently.

Well-connected to the top level of the government, the RTM President wrote to the Advisor to the Caretaker Government (an interim government formed between the close of tenure of one government and the formation of the new one). informing him about the situation and the consequences if left unaddressed. It was suggested that an inter-ministerial paramedic board could be set up that would act as future regulatory body for all paramedic courses, covering health technologists, community paramedics etc. The intervention was a success. Having been informed, the prime minister's advisor instructed both ministries to resolve the conflict, form a panel, and open discussions on a new paramedic board.

overcome trainees' hesitancy over health training and careers would be needed. In practice, however, providers had few difficulties in recruiting trainees, and plans for a nation wide marketing campaign were shelved. Providers' abilities to reach out to new clients had been under estimated and general sentiment towards health careers in Bangladesh appeared to be improving.

Deepening other functions in the training system

Policy guidelines and curricula were only part of a functioning training system. Other aspects were essential for the training system to operate effectively: coordination between the ministries of education (the BTEB) and health (the SMF); training of teachers; curricula development as a permanent function; quality assurance; social marketing; private sector advocacy. Much of the momentum created by Katalyst interventions ensured that some of these aspects were dealt with by key players themselves, but others still required external facilitation. This included: encouraging key players to engage more effectively with the media to increase awareness of and support for new arrangements; study visits to India and Thailand to study different health technologist institutes, curricula and other relevant documents, and raising the awareness of the prime minister's advisors about inter-ministerial conflicts (see Box 7).

In late 2009, Katalyst pulled out of the health sector due to strategic reasons, arguably leaving behind 'unfinished work'. It revisited the sector two years later to conduct an impact assessment, to ascertain whether changes in the training system had led to income and employment opportunities for young people. In doing so, it captured evidence that changes introduced by Katalyst were durable and are leading to a deepening of essential functions in the training system, as players adapt and respond to them (see Chapter 4).



3.2 Other features of the facilitation process

There were other significant features of the facilitation process that were necessary to achieve sustainable outcomes.

Building tangible ownership for the process of change

From the outset, Katalyst emphasised the need for the process of change to be owned by different public and private players - providers, regulators, curricula developers - active within the training market system. Without ownership, the efficacy of change would be questionable. Katalyst sought to make ownership real in a number of ways:

- An emphasis on technical assistance rather than financial support: although Katalyst used its resources in a variety of ways, change could not be simply 'bought' through financial support.
- Utilising the 'closeness' of RTM: as a credible player, RTM was less likely to send misleading donor-influenced signals than Katalyst, allowing ownership to develop among key players (see Box 8).

Box 8: The hard reality of dialogue and decision-making

A finalisation workshop organised by the CME regarding the curricula and admission criteria for community health workers offers a glimpse of the practice of a public-private dialogue process.

Members of public and private training institutes, medical and training specialists, the SMF and relevant officials from the MoHFW were invited to the event. One issue in particular provoked strong debate among participants: the requirements for registration of new programmes, governing how private sector providers could offer training. One side (public providers), fearing the influx of low quality private sector operators, argued for high entry barriers - high deposit fees and exacting facility requirements, beyond those of most public providers (but which, as *in situ* players, they felt that this would not be applied to them). The private sector argued for low entry barriers for applicant institutions but effective control mechanisms to encourage a rapid increase of good quality training providers.

Passions rising, voices raised, allegations traded - a shouting match threatened to develop across the room. The ministry secretary was listening and eventually calmed the debate. Having been briefed beforehand by RTM on the urgent need for more private sector training supply, he was aware of all the arguments. His decision was that entry barriers should be as low as possible with zero registration deposit. However, a minimum set of requirements in relation to other operational factors such as training facilities, teaching personnel and duration of approval process was defined. The messy but vibrant reality of public-private dialogue had produced a positive forward direction.

- Selective direct contracting: occasionally direct support provided an important resource in motivating different players.¹⁷ For example: the Centre for Medical Education (CME), the medical faculty of the University of Dhaka and the SMF were contracted to facilitate the curricula development process.
- Stakeholder involvement: Katalyst was conscious of the risks of doing things itself rather than
 following a facilitative process with stakeholders. In one instance, at the request of the SMF,
 Katalyst drafted policy guidelines for assistant nurses without consultation with other
 stakeholders. Consequently, the guidelines faced strong resistance from organisations such as
 the Nursing Council and were not approved.
- Starting with the most immediate and do-able: amid the many problems impinging on the
 training system, the constraints imposed by inappropriate regulations and guidelines were felt
 most urgently. Taking steps to address these to develop criteria for assessing new courses,
 and improved curricula and examination procedures and ordinances laying out minimum
 teaching standards and course content was an immediate priority. While other constraints
 (those, for example, relating to advocacy and teacher training) were important, Katalyst

¹⁷One danger of this approach is that players may expect to be paid for tasks which arguably they should be doing anyway.



believed that tangible steps could be taken to bring about change with respect to regulations and guidelines and that this could provide a platform for public-private dialogue and for other interventions.

Allowing sufficient time for the process of change

Throughout the five-year period of intervention in healthcare, the process of change was never rapid or straightforward. Nursing, which was the first focus of intervention, provides a case in point. Katalyst started its intervention in the nurse training system in April 2005, but a serious breakthrough was only achieved in mid-2007 when the first drafts of policy guidelines and curricula were approved by the MoHFW.

Katalyst's experience in nursing shows that processes of change, especially those involving reform of the formal and informal rules shaping behaviour, are not formulaic. Over a two-year period of engagement Katalyst undertook various activities - research, one-to-one discussions, lobbying, contracting players to facilitate meetings, direct technical advice and hand-holding support - aimed at bringing about change that was 'owned' by the relevant stakeholders. In the context of a multiplayer institutional framework with conflicting responsibilities and interests, and where the prevailing incentives encourage actors not to change, institutional reform cannot be externally imposed but needs to mobilise a wider process. The role that serendipity plays (the right person, at the right time) not with standing, effective processes of change are unlikely to be deliverable in a short timeframe. Katalyst's process of engagement understood this reality.

3.3 Costs and outputs

Katalyst's direct expenditure (mainly through RTM) amounted to USD678,043 over a period of five years, of which approximately 60% was direct staff and associated fixed costs (transportation, communication, office rental, etc.) incurred by RTM and Katalyst, and 40% flexible sub-contracting agreements with cooperation partners, i.e. actual intervention costs (see *Annex 3*). These costs also include a final impact assessment conducted in 2011 - nearly two years after Katalyst ceased interventions in the sector. It is worth noting that the programme spent less on staff as the intervention matured, reflecting the intensity of the human resource effort necessary at the beginning of market development initiatives to foster relationships and gain stakeholder buy-in.





- Staff costs: RTM hired a team of four full-time staff for the Katalyst project and made available the RTM president and two of its medical consultants on a part-time basis.
- Katalyst-RTM agreements: the contract between RTM and Katalyst did not detail exact deliverables; it outlined overall objectives and principles, providing the framework and a system of 'check and balance' points to ensure that interventions led to desired objectives (see Box 9). Activities and outputs were defined at these points and payments released in instalments according to performance.

Box 9: Achieving operational accountability in a process contract (Katalyst and RTM)

How to achieve tangible accountability in contracting arrangements where outputs are not tightly defined and there is a strong process nature to the task is a challenge for many agencies. In this case, a system of checks and balances sought to ensure that RTM achieved overall objectives and was in line with Katalyst's strategic approach to market development:

Reporting: monthly reports detail activities undertaken, and costs incurred during the current and previous month, as well as for the next month, as well as impact and monitoring data. Annual year-end reports describe interventions, impact and learning.

Management cycle planning: 6-months management cycle planning where previous strategies and outputs are reviewed and necessary modifications are made.

Regular progress meetings: quarterly meetings play a mostly backstopping role to keep interventions on the right track and monthly meetings among market teams from both Katalyst and RTM discuss ongoing interventions and agree next steps and activities.

Training and coaching: Katalyst sent members of RTM to international training courses on the "making markets work for the poor" approach, and, in meetings and discussions, continuously offered advice.

 Sub-contracting agreements: while the agreement between RTM and Katalyst was broad and allowed flexibility, sub-contracting agreements between RTM and implementation partners such as research organisations, technical experts, public and private institutions were more narrowly - defined, focusing on the delivery of specific outputs.

Annex 3 also provides an overview of outputs that were generated throughout the period of intervention.

4. Signs of pro-poor change

The rationale for Katalyst engagement in healthcare was that poverty is reduced if the healthcare system works more effectively, offering better services to the poor as consumers, and income and employment opportunities to the poor as workers. For the healthcare system to improve, more and better-qualified health workers are needed, which in turn requires that training systems for the various health occupations perform more effectively. Katalyst's interventions focused on improving the functioning of the training system - regulations, curricula, attitudes and capacities - and, in particular, on improving the performance of training providers.

In 2009, towards the end of its five-year commitment, Katalyst undertook an assessment of the main impacts that had been achieved; a wider and more detailed impact assessment was then conducted in mid-2011. As its exit from the healthcare sector had been more than one year earlier, the scale and depth of changes Katalyst had introduced in the training system were likely to be apparent, and it was keen to see what they were. Most importantly, Katalyst wanted to assess whether these changes had in fact led to pro-poor outcomes.

An important caveat was that the time lag involved in improved training leading to an increased supply of qualified workers (let alone improved services) is considerable. As only three years had elapsed since the adoption of the first new-style policy guidelines and curricula, tangible change was expected to be confined primarily to the training system. Nevertheless, it is clear that - in addition to discernible change for the better in the training system - there are positive signs that





young people from less well-off family backgrounds are benefiting from the new opportunities created.

4.1 The context for change

Katalyst has not been the only positive influence for change in healthcare in Bangladesh in recent years. The following have contributed towards a more conducive environment for change in training system:

- In November 2005, government and a consortium of donors launched the Health, Nutrition and Population Sector Programme (HNPSP) that outlined government's overall strategy for modernising services. This envisaged a more prominent role for the private sector¹⁸ in service delivery and highlighted the importance of improving the health workforce.
- Post-basic training in nursing started in the late 1970s. However, until 2008 only one public institute offered this course. In 2008 the private sector came on the scene, as a wider effect of Katalyst-RTM intervention.
- A number of studies most notably from the World Bank and Bangladesh Health Watch¹⁹ increased awareness of problems in the labour market for health workers, the corresponding
 training systems and the role of the private sector in healthcare.
- In its annual review of 2009, HNPSP highlighted the "crisis in the human resources of the health sector" as a priority issue, focusing more attention on how training should be undertaken.
- In January 2009, the new government introduced a policy under which community clinics would be privatised, increasing the demand for skilled health workers. This increased positive attitude towards the private sector at policy level, along with a sense of urgency to train more health workers provided increased fruitful ground for reform of training systems.

The above factors - some of which may have been influenced by Katalyst - have all had implications for the training system. However, most of these influences have been general rather than specific. In this context, the changes described below can be attributed largely to Katalyst.

4.2 Changes in the training system

This section describes changes in the training system based on the four phases in Katalyst's facilitation approach (see *Figure 4* in *Chapter 3*).

Changes in the policy and regulatory environment

Key outcomes of Katalyst's interventions have been the adoption of new government policies that opened the training market to a wider spectrum of providers, and new curricula which dictate the quality of training courses. Both outcomes have been critical to leveraging private sector investment in healthcare and establishing the government's stewardship role.

Government policies

The principal change introduced has been improved and transparent criteria for (a) approving institutes and (b) assessing their quality, for renewal of licences. Previously, when most training provision was regarded as the role of the public sector alone, government's regulatory role was scarcely recognised. Consequently government had little contact with the private sector. Changes were therefore concerned with giving meaning to a new role for government and, in particular, with strengthening the MoHFW's stewardship role.

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¹⁸ Though much of the focus is still on government/public-centric service delivery; 'private sector' refers mostly to non-profit and other public interest organisations.

¹⁹Bangladesh Health Watch (2007): Op cit.



Five new guidelines were introduced for nursing, health technologists, medical assistants, community paramedics and community health workers. Changes include the following:

- Nursing: prior to 2007, there were no guidelines for offering graduate courses in nursing. In late 2007, new guidelines outlining minimum requirements for training organisations applying to register to run BSc courses were introduced, and these were amended in 2008. The amendment relaxed entry barriers for training institutes, allowing institutes and universities with no hospitals attached to enter into partnerships with hospitals (with a minimum of hundred beds). The amendment also brought together all government policies for BSc, diploma and post-diploma nursing under a single policy guideline.
- Medical assistants: guidelines were formally approved in late 2009 and a letter instructing
 officials to follow the new guidelines has been issued by the MoHFW. This opened up the
 highly attractive training market for medical assistants to other providers; previously only five
 public schools were active.
- Community paramedics: in 2009, new policy guidelines were introduced to open up this training market to the private sector, on the basis of defined, minimum quality standards. Previously provided solely by government (under the Family Welfare Visitors programme of the National Institute of Population Research and Training, NIPORT), recruitment and training for Family Welfare Visitors had been closed for the last twelve (12) years.²⁰
- Community health workers: new guidelines for a standardised, formal course were introduced by the SMF in 2009. Before this, this was a completely unregulated market, heavily dependent on NGO involvement.

Curricula standards

Accompanying the changed regulations, new curricula were essential to provide a framework that could deliver relevant, high quality training. Among the new, standardised curricula which have been developed are the following:

- Nursing BSc (four years): this new course and curricula reflects modern standards, includes additional subjects such as English or computer classes and is recognised internationally (being modelled on the British Nursing Council course).
- Health technologists Diploma (three years): revised curricula for a range of occupations such
 as laboratory medicine, radiology, sanitary inspectorships or physiotherapy (a total of 8 are
 approved). This lays down minimum teaching standards based on international norms (similar
 to India). Previously curricula was not a standard with more vague information and lacked
 modern technical advancements.
- Community paramedics Certificate (two years): a new curriculum for private providers provides an upgraded and extended version of the FWV course, with the inclusion of Maternal, Child Health and Safe Delivery components, and covering Family Planning and Primary Care Health.
- Community health workers Certificate (one year): a new curriculum which (for the first time) formalises the course and lays down minimum teaching standards, so defining the health worker occupation.
- Medical assistants Diploma (four year): a curricula committee was formed to conduct a needs assessment and revised the curriculum which had last been updated in 1985. The governing body approved the new curricula in December 2009.

In each case, Katalyst has either facilitated the introduction of a radically different curriculum or a new curriculum where one did not previously exist. Importantly, the process of introducing new curricula - and the fact that new curricula are in place - brings with it wider change. For example, responsibility for the new nursing curriculum now lies directly with universities (rather than only with the Bangladesh Nursing Council and the Directorate for Nursing Services, DNS), with Dhaka

²⁰ Spurred into action by the interest of the private sector, after an 11-year gap, NIPORT announced it planned to re-start training initially for 800 students.



University (the acknowledged leader in nurse training) setting the curriculum benchmark. New providers have to be registered with universities. This new allocation of responsibilities encourages regular curricula revision and a stronger emphasis on quality. In the health technologist and paramedic fields, the introduction of new curricula led to a new regulatory function within the SMF.

All training institutes surveyed for the impact assessment in 2011 stated that they now use the new or revised curricula and that these have been provided to them by the regulatory bodies.

Players adapting to the changes

The adoption of new government policies and curricula was a long process and took over three years to show results. The process was however instrumental in defining new roles and responsibilities - (as well as attitudes and relationships), as key players adapted to the changes.

Attitudinal and relationship changes - whether as a result of new regulation or curricula - are critical in ensuring that what has been introduced on paper results in real behavioural change. Without success here, the ownership and sustainability of change processes is likely to be limited. Such changes are manifested in a number of ways:

Box 10: Profiling provider change; SAIC Institute of Medical Technology (SIMT)

Sohely Yeasmin is the manager and owner of several technical training enterprises which since 2005 have offered courses for health technologists and invested more than USD145,000, half for registration and affiliation fees. They have eight, different three-year courses for which students pay a fee of approximately USD1,400. Demand has been high and after three years they are making a profit. The returns have already been reinvested in their own modern diagnostic centre.

SAIC has had a number of obstacles to overcome, taking more than two years to receive approval. The uncertain situation caused by the conflict between the BTEB and the SMF also meant that it had to apply for registration under both authorities, increasing the overall investment costs and time for application. Dealing with the government was a difficult and lengthy procedure.

Recently however, things have improved. It has taken them only two months to get approval and affiliation for a new programme and the registration fees and required deposits with the MoHFW have also been significantly reduced. It now has more institutes registered under the SMF than under the BTEB. The approval they received for the new health technologist institute is valid for two years, after which a review will be conducted by the MoHFW.

The future prospects for SAIC, she believes, are bright.

- Reduced scepticism towards the private sector: key government officials have explicitly stated their support for private sector involvement in training. The previous suspicion of the private sector shown by many officials has diminished. The prevailing view in government circles is that the private sector has a necessary, valid role to play, a view certainly also supported by the new revenue stream opened by registration and inspection fees.
- Improved inter-ministerial coordination: health courses previously registered withthe BTEB/Ministry of Education are now under the jurisdiction of the MoHFW (although the BTEB still regulates some institutes), thus removing conflict between the two ministries. An interministerial dialogue has been opened on the establishment of a new and independent Paramedics Board as an overall regulatory body for medical education (on the direct instruction of the Advisor to the Caretaker Government, which came as a response to Katalyst's intervention).
- Improved cooperation between the MoHFW, the medical faculty and other players: the process of policy and curricula development has brought together players who were previously loosely disconnected. Private institutes stated that the SMF showed more interest and responded quickly to applications and information requests. The dean of the medical faculty of Dhaka University has expressed his wish to deepen relationships with private institutes.
- More enthusiasm from private providers: the response of providers to new opportunities created by a more conducive environment is demonstrable, manifested in new investment and innovation (see Boxes 10 and 11).



More enthusiasm from students: although other factors have contributed to change, Katalyst's interventions seem to have added to a general sense of dynamism.

More training providers and courses

The purpose of improving regulations, curricula, attitudes and capacity within the training system has been to provide a basis for improved performance by training providers, and in particular to expand the number and quality of service providers (crowding-in) and trainees.

Annex 4 summarises recent trends in the provision of health training with respect to providers and number of registered student seats. From it, four points stand out:

1. Major growth: there has been a sevenfold increase in the number of
registered private providers (22 to 149)
and a four-fold increase in those
providers' registered seat capacity
(2,164 to 11,730) (see Figure 5). Some
of this increase reflects a
reclassification of existing providers, but
many new private institutes have been
set up and existing institutes have
increased their number of seats and
added new courses.

Box 11: Profiling provider change: Kumudini Nursing College

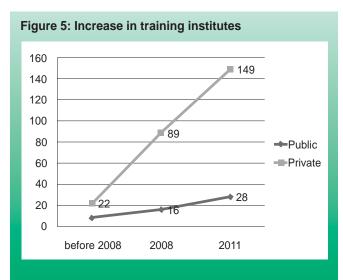
Kumudini Hospital is an established, not-for-profit organisation that has operated a school for diploma nurses since 1973. After considerable investment in buildings and infrastructure as required by the new government regulations, it started a programme for BSc nursing in 2008.

Kumudini is clear about the reasons for setting up the new college:

"Nursing is a profession which is not looked on with dignity and honour in our country. [...] There is only one BSc nursing college run by the government of Bangladesh. In the private sector until now there is no nursing college which has come up. But there is a huge shortage of skilled nurses in Bangladesh and also abroad. If we can set up a nursing college these graduates will not only be able to work in the country but will also get opportunities to work in Europe, the Middle East and the United States. We want to give them the practical exposure from the very beginning along with English and computer literacy."

The new college can take up to thirty students per year. Students from rural and poor family backgrounds may receive scholarships and in return agree to work for at least two years in the Kumudini Hospital after graduation.

- 2. Growth trends have not been uniform: there are notable differences between different occupations:
 - Strongest growth has been observed in the medical assistants training course. Previously only seven government institutes offered courses; now an additional eighty two institutes have crowded into the market after regulatory changes instigated by Katalyst allowed private sector institutes to offer courses. Growth in nursing BSc courses has been only moderate, for several reasons: (a) the approval procedure is more onerous and complex; (b) the viability of private institutes is lower due to the significant up-front investment required by the policies and higher costs for students; and (c) negative social



attitudes towards nursing as profession which are only gradually changing (see Box 12).

Although the post-diploma nursing BSc course was not the result of Katalyst intervention, it
has been noted that it was only after the new (four-year) BSc course was introduced and the
nursing profession upgraded to level two in the official ranking of the government (which
were direct outcomes of Katalyst interventions) that demand for post-diploma courses





increased and more institutes started offering the course. Prior to Katalyst intervention, there was only one government institute offering the post-diploma nursing BSc course; now there are four public and eight private institutes.

- The strong initial growth in health technologist diploma courses reflected a re-classification of existing and new activity that was previously either under the BTEB or unregistered. Over the past two years however more new institutes have been established and existing ones have opened branches in other regions.
- Growth in community health worker courses stagnated due to uncertainty caused by the MoHFW, which halted registration following a change in senior personnel. After a high court ruling, operation of the institutes resumed in early 2011. The provision of these courses is clearly dominated by the private sector.
- 3. Future growth is likely to come from private providers: initial indications suggest that most of the impetus in future healthcare training will come from private sector players. Most strikingly, nearly all the new applications to run training programmes are from private investors. This trend can also be seen with regard to the overall seat capacity: whereas the seat capacity of private institutes increased from 2,164 in 2008 to 9,010 in 2011, that of the public sector over the same period of time increased only from 1,090 to 2,720.
- 4. Promising signs of organisational sustainability: of the private training institutes surveyed for the impact assessment, 53% said that they had already reached break-even point, reflecting the profitability of providing courses; 61% stated that it took about two to five years to recover their initial investment and reach this point. Overall, institutes were optimistic about their future, with 78% of those which are proving profitable planning to invest in further seat capacity.

Overall, these trends indicate a positive response from providers, and that positive trends can be expected to accelerate.

Changes in the training system in response to Katalyst intervention

For innovations to be sustainable and continue to evolve and unfold more widely, supporting functions and rules in the training system - and the players that perform them - need to respond to and accommodate these innovations. Policies, curricula, attitudes, relationships and application procedures are only parts of a fully functioning training system. Others include examinations, recruitment, teacher training, coordination and advocacy by the private sector.

In what ways has the training system responded to changes stimulated by Katalyst? In addition to the continued crowding-in of institutes and the rising numbers of students discussed above, there are promising signs of deeper change in the training system:

• A new central examination system: as a reaction to fears that an increase in private institutes might compromise the quality of training, the SMF tightened the examination system for health

Box 12: Background of students - a nursing student

Tania Sultana is 18 years old. She is the second of three daughters in a five-member family from Jessore *Sadar*. Her father works at a jute mill in Panchagarh and earns a salary of USD87 (BDT6,000) per month. He frequently suffers from bad health. They have a small plot of land which is part of a share-cropping scheme from which they get rice and vegetables.

After completing her Higher School Certificate, Tania took up a BSc course offered by International Medical College (IMC) in Dhaka. For this she has to pay an admission fee of USD130 (BDT10,000), a development fee of USD650 (BDT50,000) and a tuition fee of USD32.50 (BDT2,500) per month. She receives about USD50 (BDT4,000) from her parents every month, from which she has to pay for hostel fees, books etc.

In practice, IMC have reduced Tania's fees in return for her 'bond' that will require her to work in their affiliated hospital for a period after she has graduated. She believes that she can then make a monthly income of USD200 (BDT15,000) (more than twice her father's wage), which will significantly increase the income for her family.



technology, medical assistants, community paramedic and community health worker courses. Previously, examination papers were prepared centrally and then disseminated to training institutes, who administered the exams themselves. From July 2011 however, students sat their exams in seventeen approved centres across the country (mainly on public school premises). Private operators have expressed their support for a stricter system and are confident about the pass rates of their students under it (see *Box 13*). In fact, some of them had already advocated to the SMF the need for a central examination system, as in the past, papers have been leaked early to some institutes.

- Pressure from students: given the rising number of institutes and BSc nursing students under its aegis, Dhaka University's medical faculty found it increasingly difficult to accommodate demand for more centralised examinations, leading to concerns that this would increase the time required to complete studies from four to six years, increasing student costs. In 2010, this concern erupted in student protests, prompting the university to hire more staff. The new dean is supportive of private institutes providing the nursing BSc and is determined to tackle this problem.
- A new paramedics board: in 2008, Katalyst raised the issue of the conflict in responsibilities between the ministries of education (the BTEB) and health (the SMF), in correspondence with the Prime Minister's adviser. In response, a joint panel consisting of top-level officials of both ministries has been set up to establish an independent paramedics board to act as the regulatory body for all medical diploma and certificate courses. This will improve registration procedures and costs and curricula development, and strengthen government supervision. Negotiations continued between the ministries after Katalyst's withdrawal from the sector and a constitution has been drafted. The new board is scheduled to be operational by the year end.
- Increasing government accountability: in 2009, withan ew policy guideline and revised curricula
 in place for community health workers, government approved a number of private institutes to
 start training. Shortly after however, it rescinded this approval; senior personnel in the MoHFW
 - had changed and did not understand the benefit of private sector involvement. The institutes that had already received approval took the matter to court. In two subsequent rulings, the High Court of Bangladesh reconfirmed government's approval and allowed the institutes to continue. This illustrates that although the government's position can often be defined by personalities, once change has been institutionalised, it is hard to reverse.
- Regular inspections and registration provide a welcome income stream: during its 2011 impact assessment, Katalyst found that training institutes were being inspected regularly by regulatory bodies. New institutes and those that do not yet fully comply with requirements laid out in the policy guidelines are inspected on an annual basis; others are inspected biannually, in order to renew their licences. A positive side-effect of the increase in the number

Box 13: Students from private schools do better than their counterparts from public schools

The quality of training courses has been a key area of dispute between proponents of private sector involvement and their opponents. However, as official statistics of the SMF reveal, pass rates of students, on average, from private institutes are higher than those from public institutes - which may indicate better preparation (i.e. better quality training) for the exam (see *Table 4*).

Table 4: Pass rates for medical assistant and health technology courses together

Year	Туре	Pass rate %
2009	Public	74.80
	Private	78.59
2010	Public	61.06
	Private	69.02

Source: SMF internal records, 2011

of institutes has been an increased income stream for the regulatory bodies - most notably the SMF - as a result of more registrations and inspections, for which institutes are required to pay fees. This income ensures the sustainability of government's commitment to its stewardship role for quality assurance (see *Annex 5*).



Many of the changes described have occurred without external support; the system is responding and adjusting by itself. Some changes - such as establishing a new paramedics board - arguably would have benefited from further external facilitation, to guide the pace and direction of change. In hindsight it seems that Katalyst exited the sector prematurely in 2009. Further interventions would have helped consolidate the performance of supporting functions and rules in the training system.

4.3 Changes in the labour market

Have changes in the training system led to improved performance on the labour market for health workers? As noted, the time elapsed between changes in the training system and the graduation of more and better qualified students, means that changes in the labour market will only be visible after several years. However there are early indications that the labour market situation is improving, based on the impact assessment that Katalyst conducted in July 2011:

- Overall demand for health workers remains high: 61% of institute operators expect that their graduates will take less than three months to find a job in their profession; students themselves were even more optimistic (71.5%).
- Increasing recruitment activity: healthcare service providers (hospitals, clinics, practices) are increasingly aware of the rising number of training providers and have started building relationships for recruitment purposes. Of institutes surveyed, 45% reported that they had been approached by potential employers for graduates (85% of these requests came from private clinics, hospitals and medical colleges). A quarter of students stated that their training institute provided them with support to establish contacts with future employers.
- Demand shifting to formal training: though difficult to verify, the increased recruitment activity of health service providers suggests that demand for health workers is increasingly shifting towards formally certified and government-approved-course graduates. Students also regard formal courses as providing better employment prospects than informal courses (such as those provided by NGOs).
- Preference of work location: nearly two-thirds (63%) of students confirmed that they wanted to return to their home towns or villages after completing their course; only 30% preferred Dhaka or another major city. This suggests that the shortage of health workers in rural areas might be reduced if this trend continues. This is especially the case for professions such as medical assistants, community paramedics and community health workers. For student nurses, 74% preferred to work in Dhaka or a major city.
- Preference of work type: the majority of students (85%), across all courses, stated that their first preference would be a job directly related to patient care, rather than administration. This is an encouraging sign; in the past, excessive numbers of health workers have ended up working in administration rather than providing health services. Nearly half (44%) of students interviewed stated that their second preference would be self-employment (i.e. opening their own practice or pharmacy), particularly community paramedics (50%) and health workers (64%).
- Preference of employer: the labour market is still dominated by the perception that the public sector provides the best employment opportunities. Nearly 90% of students cited public sector jobs as their first preference. Government circulars advertising vacancies still determine the choice of course and profession. Most students lacked awareness of the dynamics of private sector investment in healthcare, but 65% cited the private sector as their second preference.

Although largely indicative at this stage, the findings suggest that labour market shortages will ease if current trends (more institutes, more students) continue and perceptions of where to seek employment prevail. Although the preference is still for public sector jobs, it seems likely that market realities will push graduates towards employment in the private sector, as shown by the increased recruitment activity from private healthcare providers.



4.4 How pro-poor were Katalyst's interventions?

Katalyst's overall objective is poverty reduction. For its interventions in healthcare this meant: (a) creating income and employment opportunities for people from lower household income backgrounds; and (b) improving health services for the poor and in rural areas more widely. To what extent has Katalyst achieved these pro-poor objectives?

Pro-poor income and employment

The 2011 impact assessment focused on understanding the backgrounds and motivations of students. Among the findings were the following:

• Large numbers of students from a poverty background: a calculation of the poverty profile (PPI²¹) of students, which takes into account several socio-economic factors that determine the income situation of households, showed that 35% of students came from households with incomes of less than USD2.5 per capita per day (see *Table 5* for more details). Those above this threshold were mainly from lower-middle income backgrounds. Strong variations between courses were observed: 60% and 45% of students in community paramedic and community health worker courses respectively were from a poor family background, compared to 35% on Nursing BSc courses (reflecting higher fees and educational preconditions).

Table 5: Percentage of surveyed students from families below the poverty lines

USD per	Course (% of surveyed students)					TOTAL
person per day	BSc Nursing	MAT	СНЖ	нт	СР	
Below USD1.25	-	1.2	5.6	0.9	5	1.8
Below USD2.5	34.8	36	44.4	26.7	60	34.9

- Most students come from rural areas: 68% of students surveyed were from rural areas and 23% from peri-urban areas. This corresponds with the fact that many new training institutes have been established outside urban centres such as Dhaka and Chittagong. Interestingly, the percentage of students from rural areas was highest for the Nursing BSc (83%) and Medical Assistants (79%) courses. The medical assistant diploma in particular is highly popular as it is seen as a more feasible option to a doctor's degree (MBBS).
- Many students are from an agricultural background: the new training courses in the medical
 professions open up new avenues out of poverty. A quarter of students were from households
 where agriculture was the principal source of income. This trend was strongest on community
 paramedic (40%), medical assistants (30%) and community health worker (28%) courses.

In summary, new training courses appear to have opened up new employment opportunities for young people who are predominantly from poor or lower-middle-income households, living in rural areas and for whom a medical profession presents a chance to raise their family's income substantially.

Given this profile of students, most private training providers offer a variety of innovative ways of financing their courses. These include: payment in instalments (66% of surveyed students); payment after the harvest season; student loans; part-time work arrangements; pay-back after graduation, through work contracts in institutes' own health facilities; and discounts (in some cases even free places). Whilst these payment modalities make courses more affordable, the costs of training remain high for the poorest families. That said, the impact assessment revealed that poor families regard this as investment in their future and a way out of poverty (see *Box 14*).

²¹The Progress out of Poverty Index (PPI) is a simple and accurate tool that measures poverty levels of groups and individuals. Using a practical list of ten indicators (family size, the number of children attending school, type of housing et al), staff members interview clients while observing their households. Each indicator receives a score that reflects client response, and all ten indicators receive a total score. For further information see www.progressoutofpoverty.org



Box 14: Innovative financing solutions

Md. Shariful Islam is 22 years old and single. His family has five members. He lives in the village of Shahapur. His brother is a garment worker, providing most of the family's monthly income which is around USD200. His father is retired and contributes to this income through his pension.

Shariful is in his third year of a four-year diploma course in pharmacy at the Institute of Medical Technology in Pabna. The total course fee is around USD1,600 - a large amount for his family to bear.

To help finance his studies, and because he passed the first two years with distinction, the institute offered him a position as an assistant teacher. Shariful therefore already works part-time during his studies and plans to become a full-time pharmacy teacher one day. In this capacity he expects to earn around USD330 per month and thereby raise the family's income substantially.

Improved access to health services

Until changes in the training system have had a more substantial effect on the labour market there will not be a marked improved in health services. It can be assumed that the increased number of students who receive better quality training now will bring about a positive change in the provision of health services as they enter the job market in the near future.

One of the most encouraging signs is the preference most students (61%) show for returning to their home towns or villages as their first choice of employment in healthcare, rather than in a major city. As observed above, this is particularly the case for medical assistants (79%), community health workers (90%) and community paramedics (78%), professions which provide the bulk of health services in rural areas. Given this preference, an improvement in access to and quality of health services in rural areas appears likely (see *Box 15*).

Box 15: Two dentists providing healthcare services to the poor

Two dentists have started practices in Bogra following the completion of their three year HT Dental diplomas from TMSS. Md. AhsanHabib, 26 years old, is one of the two income earners in his 5-member household. The number of patients seeking treatment at his practice is risingit's now around seven to eight every day. He charges BDT200 (USD2.60) for new patients, BDT100 (USD1.30) for repeat visits, and discounted rates for patients from a very poor background. Half of his patients travel in from rural areas and many are from farming or small business backgrounds. Approximately 70% are women. With a monthly income of around BDT8,000 (USD100), Ahsan is looking to fund his way through a BSc in dentistry at Dhaka Dental College.

Md. Shariful Islam, 28 years old, also took the three-year HT Dental course in TMSS, following his paramedic studies at SID Foundation. Together with his wife, Rebeca Suktana, Shariful runs a small training institute offering a dental course (yet to be registered under the SMF) as well as a small practice. He attends between eight to ten patients daily, charging BDT30 (USD0.40) for general patients and BDT200 (USD2.60) for dental patients. Like Md. Ahsan Habib's practice, numbers are also up on previous years. Sixty percent of his patients come from rural areas, and an equal percentage are female. Shariful and Rebeca's dental practice brings in a monthly income of BDT30,000 (USD385).



5. What does the Katalyst experience offer to the field?

Katalyst's experience in the healthcare sector has been difficult but positive: it has helped shape the training system for health workers in Bangladesh. An effective training system for health workers is essential to the quality of, and access to, healthcare services. By taking a systemic approach, Katalyst consciously sought not to exacerbate the fragmentation of healthcare, but instead to strengthen one of the 'building blocks' of the healthcare system.²²

This approach was not driven by ideology but informed by analysis and tempered by pragmatism. Katalyst understood that change required moving beyond an unrealistic mantra that public interest means that government must do and pay for everything, from delivery to regulation. For the system to become more effective - to the benefit of poor consumers and workers - it needed to be pluralistic: harnessing the incentives and capacity of different public and private players to perform roles to which they are best suited.

Over a five-year period, Katalyst and its implementation partner RTM sought to stimulate systemic change in the training system. Their facilitative approach was characterised by engagement with different public and private players, solid market analysis and understanding of the political economy, flexible and responsive interventions, an emphasis on building ownership and - perhaps most of all - patience and perseverance. Interventions have focused on the most urgent constraints in the training system, related to government regulations and the negative attitudes towards the private sector that prevent service providers from offering more and better training courses.

Impact on the labour market - in terms of more and better-qualified health workers - and, ultimately, improved health services in Bangladesh requires a time-frame beyond that of Katalyst's period of intervention. However, interventions focused on regulatory change, curricula change and new training courses have achieved demonstrable impact on the way the training system works:

- Significant numbers of training providers are crowding into the training system as a result of more appropriate entry requirements, allowing better regulated private sector participation;
- Training, based on approved curricula, has become more standardised, which will contribute to enhanced quality;
- New policy guidelines and curricula have given government a basis for more effective stewardship;
- Increasingly, in attitudes and actions, government officials acknowledge the reality of a pluralistic healthcare system in which both the public and private sector have a role to play.
 Most important, a major change in the role of government - from provider to steward and regulator - has been instigated;
- The attractiveness of health professions as source of employment and income is increasing and poor people and women are benefitting from this change.

These changes have been systemic in that they have helped to unblock the underlying constraints preventing further development. Appropriate incentives, capacities and institutions appear to be in place to permit further investment, expansion and evolution in the future. It is against this potential for large-scale change that Katalyst's investment of USD543,740 over five years should be judged.

In recognising this achievement, it is important also to recognise some of the challenges remaining, key lessons, and opportunities for wider learning that emerge from Katalyst's experience.

²²WHO (2007): Op. cit.





5.1 Challenges remaining

Health worker training, like any market system, 'has to respond to multiple influences;' there is no single 'simple way' to unleash successful change. Katalyst focused on the most important constraints but other weaknesses remain. Arguably, Katalyst exited the sector prematurely, when other essential functions in the training system still required support. These include:

- Capacity-building: the quality of teaching resources is widely seen to be a problem, with many
 organisations relying on freelance trainers and openly concerned about their competence. In
 government, the shift from a purely service provision role to one that includes supervisory and
 regulatory functions demands new skills and practices. For the training system to continue to
 thrive, mechanisms for capacity-building will need to be developed.
- Advocacy: in its role as facilitator, Katalyst has sometimes acted as advocate for the private sector. In the long term, if the rules which govern the training system now are to remain appropriate they will need to be dynamic (e.g. curricula will need to change to reflect new trends); it will be necessary for the private sector to develop the capacity and relationships to present an effective and responsible voice towards government.
- Inter-ministerial coordination: although the work of Katalyst went a long way to improving communication and cooperation between relevant government ministries, there still remain many hurdles to overcome. For example, although negotiations between the ministries for education and health for the establishment of a paramedics board are on track, the draft constitution suggests a need to clarify the overall purpose and responsibilities of the board in its role as independent regulator of diploma and certificate courses. Some form of external facilitation would go a long way to ensuring the positive start made under the programme continues.
- Other constraints may arise in relation to other functions, such as information for training
 providers and students, recruitment by health service providers, or research and development
 on training curricula. The extent to which development agencies should engage in developing
 these is an open question. Katalyst's experience has demonstrated somewhat that once the
 impact of initial pilot interventions has broadened to include more players, the system acquires
 a critical momentum and adapts and responds of its own accord (as it did in the case of central
 examination systems or the paramedics board).

Further facilitative action by development agencies might help to accelerate and deepen systemic changes, but there is a risk that local ownership and initiative could be jeopardised. This dilemma can only be reconciled if agencies have a clear sense of how the healthcare training system should function in the future and of the constraints that might prevent it from achieving this. If this is not kept in mind, actions may well be taken on an intuitive basis, increasing the risk of 'traditional' direct support and the negative effects that may result.

5.2 Key lessons from Katalyst's experience

Katalyst's interventions share a number of characteristics which seem to have been critical to its success, and offer lessons to other development agencies and initiatives.

Market analysis to build credibility

Through a combination of formal studies and pilot interventions. Katalyst invested considerable time and effort in understanding the healthcare system and its related training market systems - and why they weren't working. This proved valuable for the following reasons:

- It provided Katalyst with intelligence and insight, to advance its own understanding beyond obvious symptoms of problems to identify their less obvious underlying causes;
- It helped Katalyst establish credibility among players, by establishing a sound factual basis for discussions, which was essential to give weight to Katalyst's arguments for change;
- The information collected and regularly updated provided a continuous record of market change and a rigorous basis for measuring results.



A private sector entry point to the system as a whole

Katalyst's initial focus was on private sector training providers, which made sense for two reasons. First, it was clear that new private sector interest - new hospitals and training institutes - was a source of dynamism in healthcare. The potential implications and opportunities from this emerging force had to be understood, especially the incentives and capacities of those involved. Second, as a precondition for effective engagement with government, it was necessary to have specific 'hands-on' information on private sector issues. A private sector entry point helped create the raw material with which to approach government and address constraints in the regulatory environment.

Understanding and engaging the 'political economy'

In approaching government, Katalyst was aware of the need to understand and deal 'smartly' with the swirl of attitudes, incentives, relationships and official and unofficial power structures that made up the political economy around healthcare. This was particularly important in encouraging government into a more accountable and responsive relationship with the private sector.

Changing government perception proved a lengthy, frustrating process which required persistence and a mixture of tactics. Katalyst had to navigate the government hierarchy and decision-making processes. Interaction was often informal, spontaneous and subject to setbacks - which sharpened Katalyst's insight and informed its tactics. While Katalyst did not use any formal 'tools' for engaging with government players, it continually assessed the nature of different players' positions intuitively and showed considerable creativity in acting to bring change - practical political economy in action.

Direct support to bring a supply-side response

The bulk of Katalyst's work focused on changing regulations, curricula and the attitudes impinging on the supply and demand of training. However, it did work directly with training providers. The rationale was that, even when the regulatory environment had become more conducive, other problems can inhibit an effective supply-side response. These might include uncertainty over new regulations or processes, information gaps and lingering relationship frictions. Katalyst felt that it was not realistic to simply assume that competent providers would now flood into the market: 'getting the big picture right' is often not enough on its own.

Bringing tangible ownership over dialogue to public and private stakeholders

From the outset, Katalyst emphasised the need for the process of change to be owned by the different public and private players active within the training market system. Without this ownership, the sustainability of change would be questionable. Katalyst sought to make ownership real in a number of ways:

- Emphasis on technical assistance rather than financial support: resources were used in a variety of ways, but it was recognised that change could not be 'bought' with financial support;
- Utilising the 'closeness' of its implementation partner: as a well-regarded player in healthcare, RTM was less likely to send misleading, donor-influenced signals - which might have inhibited ownership among key players - than was Katalyst;
- Selective direct contracting: occasional direct support provided an important resource in motivating different players;²³
- Stakeholder involvement: Katalyst was aware of the risks of 'doing it' itself rather than following a facilitative process with stakeholders, for example in developing new curricula;
- Starting with the most immediate and do-able: amidst the myriad problems impinging on the training system, the constraints imposed by inappropriate regulations and guidelines were most

²³Same as footnote 17.



urgently felt. Measures to address these were an immediate priority. While other constraints were important, Katalyst believed that tangible steps taken to change regulations and guidelines would provide a platform for genuine public-private dialogue and for other interventions.

Allowing sufficient time for change

Throughout the five-year period of intervention in healthcare, Katalyst's work in different, related training systems proceeded in parallel. The process of change was never rapid or straightforward. Katalyst's experience shows that processes of change, especially those involving reform of the rules (formal and informal) shaping behaviour, are not formulaic. Katalyst's engagement entailed various activities - research, one-to-one discussions, lobbying, contracting players to facilitate meetings, direct technical advice and hand-holding support - aimed at bringing about change that was 'owned' by relevant stakeholders. In the context of a complex environment, characterised by conflicting or overlapping responsibilities and interests, and where the prevailing incentives are not to change, institutional reform cannot be externally imposed; it can only emerge from a wider process of change. Notwithstanding the role that serendipity plays, effective processes of change are unlikely to be delivered in a short timeframe. Katalyst's engagement in the system understood this reality.

5.3 Opportunities for wider learning

Katalyst chose to maintain a low profile during its work in healthcare. It wished - as an organisation with no health label - to create a space, removed from the attentions of others, for intervention.

Now, after considerable impact has been achieved and experience accumulated, there are lessons from Katalyst's work which might be applied more widely by development agencies seeking to improve the performance of healthcare systems and vocational training systems:

- Adopting the approach throughout the health system: healthcare is a vast and complex area, with many deep-rooted constraints. The incentives, information and power structures around the delivery of healthcare services pose key challenges for all agencies.²⁴ Katalyst's experience suggests in principle that healthcare services are open to examination through a systemic lens and responsive to facilitative actions that emerge from this analysis. To engage with this, agencies need to become more comfortable with a pluralistic vision of the healthcare sector, therefore engaging with a diversity of players, and be prepared to work in other supporting market systems.
- Developing vocational training systems: Katalyst's experience in developing a pluralistic healthcare training market system might be drawn upon to build improved training systems for other occupations where there is a strong public interest, for example, other types of vocational and technical training. Again, following this approach would require that agencies engage with a new set of players and develop appropriate credibility and networks with them. In these areas, as in health, there are likely to be strong vested interests and incentives urging a reinforcement of the status quo. Yet it is clear that, as in healthcare training in Bangladesh, the status quo often a small and subsidised public sector with a mixed delivery record and a growing but slightly anarchic private free-for-all neither offers effective skills and knowledge, nor serves national development. Most of all, the status quo is not serving the interests of the poor.

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²⁴Bloom, Gerald et al (2008): Making health markets work better for poor people: Improving provider performance, Future Health Systems, Sussex.



Annex 1²⁵: Katalyst and the market development (M4P) approach²⁶

The project

Katalyst aims to contribute to increased income for men and women in rural and urban areas by increasing the competitiveness of farmers and small businesses in key rural and urban sectors, reaching 2.3 million farmers and small businesses, providing employment for 450,000 poor people by the end of the phase in 2013.

Katalyst follows a *pro-poor market development approach* also known as *'making markets work for the poor' (M4P)*. It focuses on market systems that are conducive to the participation of the poor, those which provide the basis for increased enterprise competitiveness, and those which allow the poor to access either growth opportunities or basic services as a means to reduce their poverty.

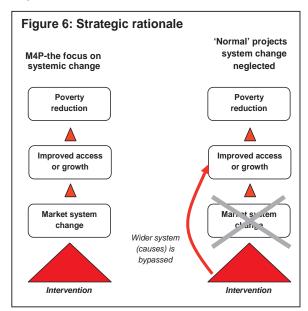
Katalyst is a jointly-funded programme of the Swiss Agency for Development and Cooperation (SDC), the UK Department for International Development (UKaid), the Canadian International Development Agency (CIDA) and the Embassy of the Kingdom of the Netherlands (EKN). Phase one (2002-2007), during which interventions in the healthcare sector were mainly carried out, was also sponsored by the Swedish International Development Cooperation Agency (SIDA). Katalyst is implemented under the Ministry of Commerce (MoC) of the Government of Bangladesh by Swisscontact and GIZ International Services. Katalyst began its second phase in March 2008 with a budget of CHF50.67million.

Katalyst's approach: Making Markets Work for the Poor (M4P)

Katalyst's approach is distinctive not simply because of its objectives for pro-poor market development but also for how it goes about achieving them. More conventional development

initiatives support the poor by providing them directly with knowledge, goods, and services. While such a direct approach can achieve quick results, its sustainability is frequently limited, is often unable to achieve scale, and may also have a distortionary effect on markets.

Katalyst therefore avoids providing support to its target group directly. Instead it works **indirectly**, focusing on achieving **systemic change** (see *Figure 6*), and partnering with a wide range of domestic and international private and public sector intermediaries who have long-term business interests or a mandate in a sector. Katalyst actively seeks to **'crowd-in'** domestic public and private market actors. By harnessing the incentives and resources of these actors, Katalyst's interventions can leverage its own resources, resulting in a larger-scale and more sustainable impact.



²⁵This is a synthesis of Katalyst's strategy brief, available at www.katalyst.com.bd. Please refer to this document for more detail.

²⁶See the three key M4P documents: A Synthesis of the Making Markets Work for the Poor (M4P) Approach; Perspectives on the Making Markets Work for the Poor (M4P) Approach. Published by DFID and SDC and available at www.M4Phub.org.



Strategic rationale

Katalyst's overarching rationale is to reduce poverty through pro-poor market development. This means that it needs to work in sectors that are both important for the poor and where there is potential for positive change, i.e. inclusive growth and poverty reduction through increased enterprise competitiveness and/or access to services. Katalyst's selection of sectors is determined by applying the three-part market development 'lens.' This lens helps Katalyst choose the sectors with the highest potential for achieving its poverty reduction objective. The key elements are:

- Poverty reduction potential: a sector's relevance to Katalyst's target group; the number of poor in the sector; the poor's specific role (as producers, entrepreneurs, employees or consumers); and gender, environmental, and social considerations.
- Pro-poor growth and access potential: a sector's overall trends and potential for growth and/or increased access and, more particularly, relative to the poor's level of 'performance' (in terms of productivity, market position, or terms of access).
- **Systemic intervention potential:** the feasibility of stimulating change in a sector which is systemic (i.e. addresses the underlying causes of sector underperformance) and can achieve scale. This includes a consideration of Katalyst's own capability and the existence of key domestic actors who might support or oppose change ('drivers of change').

Based on these criteria, Katalyst works in a range of sectors, from simple rural commodity sectors to service sectors. Prior to entering the healthcare sector in phase one, Katalyst applied the same lens and found that (a) the sector was important to a large number of poor people (as workers and consumers), (b) had good growth potential with increasing private sector investment coming in, and (c) provided a feasible basis for Katalyst intervention (partners, leverage points, resources etc.)

Understanding the root causes of market performance

Katalyst focuses on stimulating systemic change within selected pro-poor sectors. During the process of sector selection, some constraints to sector underperformance - the reasons why the poor cannot 'get a better deal' - are likely to become apparent. But to achieve systemic change, Katalyst searches, analyses and addresses the root causes of these constraints rather than their more obvious symptoms. This requires a good understanding of the dynamics of a sector, acquired through research and pilot interventions. In order to do this, it uses a simple model that reflects the multi-function and multi-player nature of market systems (see *Figure 7*).

Katalyst has learnt that the root causes of any one sector's underperformance often lie in a related or supporting sector. For instance, low productivity in the vegetable sector - particularly for poor farmers - is caused by the farmers' limited access to quality inputs (seeds and fertiliser), and that this has its roots in the various dysfunctions in the seed and fertiliser sectors. To thus sustainably improve the poor's performance in the vegetable sector Katalyst needs to stimulate performance in the seed and fertiliser sectors. Similarly, in the healthcare sector, poor quality of and access to health services is related to an under-supply of skilled health workers in the labour market; this has its origins in the under-performance of the training system, which is where intervention was required to bring about systemic change.

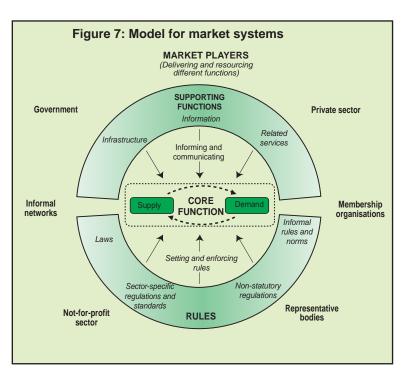
Facilitative interventions

Katalyst's emphasis on sustainability informs both its intervention design and its *modus operandi*. The project promotes innovation within sectors so as to overcome established, often deep-seated, constraints, in order to stimulate wider, systemic change. It cannot, however, deliver these changes directly. Instead of implementing new methods, tools, and roles, Katalyst works with market partners, in line with their incentives, to change their approach to the sector. If changes are to be sustainable, they must be owned and driven by market players with long-term interests - commercial and other incentives - in a specific sector, beyond the period of Katalyst intervention. The project's interventions are thus based on partnership and aim to crowd-in: to identify and work with appropriate market players to stimulate them to innovate - in terms of altering their behaviour, practices, position in a market, or relations with other players - in order to bring about a change in



market performance. Understanding the incentives, capacities, and limitations of a partner is therefore crucial, as they are only likely to continue a venture without Katalyst support if their interests are met.

If Katalyst is to crowd-in market actors successfully, the nature of its support is critical. Support needs to add sufficient value to attract and influence partners but should not be excessively intensive in terms of resources provided or its duration, as this would distort the behaviour of partners or other market actors, or displace initiative. Katalyst has thus to ensure that its support is light touch, facilitative and matched by contributions from partners to ensure their commitment.



Explicit commitment to sustainability and scale

The exit strategy from interventions is informed by Katalyst's explicit focus on crowding-in and from its determination to avoid becoming part of the market system. Initial interventions introduce and test an innovation with a partner, encouraging and monitoring its adoption until the point where the partner is able to maintain and/or expand the innovation itself.

To verify an innovation's potential and durability, Katalyst sometimes replicates an intervention with several partners in a variety of contexts. Where these innovations successfully address an identified constraint and are adopted sustainably, Katalyst considers how that innovation might be scaled up. This might be achieved in a number of different ways, depending on circumstances. In Phase 2, Katalyst's ambition to scale-up has led to several changes in the way the programme works:

- Analysis focused on understanding entire sectors, not just specific markets or segments, which are important for the poor;
- Identifying and collaborating with scale agents who have resources and incentives, to achieve significant crowding-in across a sector;
- Greater integration of sectors and supporting sectors, to implement multi-faceted interventions which can achieve large-scale systemic change;
- More active management of its portfolio of sectors, cross sectors and interventions to ensure that the balance of short-term results and long-term sustainability is maintained.





Annex 2: Two examples of training systems

Example 1: Training system for nurses in 2004/05

Key players and what they did

Nurses were trained through a three-year diploma course on basic nursing and midwifery/orthopaedics. These courses were provided by 44 institutes, of which 38 were government-owned and six were private, together producing about 1,540 diploma nursing graduates every year. Private institutes, mainly associated with hospitals and clinics, regularly complained about the inappropriateness of the nationally-set curriculum and some had even linked with private universities to start post-graduate courses with their own curriculum - all under the radar of government approval.

Two major regulatory bodies were important for the nurse training system. The first, the Directorate for Nursing Services (DNS), under the Ministry of Health and Family Welfare (MoHFW), had overall responsibility for the management of human resources and nursing institutes. Despite its wider mandate, it focused to a large degree on the recruitment of nurses for government hospitals. The second body, the Bangladesh Nursing Council (BNC), was an independent regulatory body for nursing education and services, approving and registering nursing institutes and also responsible for the final examination and licensing of nurses. More broadly, within the MoHFW structure itself there were several other relevant administrative departments such as the directorates for medical education and health services.

In addition to these bodies, the semi-autonomous Centre for Medical Education (CME), under the banner of the MoHFW had been established as a public research and development institution for the medical education system. Its brief included providing training courses for medical teachers, monitoring training quality, and developing curricula and training materials. In nursing it played a particular role in teachers' training.

Outside the public sector, two professional/advocacy groups were prominent. The Bangladesh Nurses Association (BNA) represented nurses in public hospitals and clinics and was closely associated with the BNC. The Bangladesh Medical Association (BMA), the national association for physicians, was a powerful pressure group with strong links with the MoHFW. Both organisations were proponents of the status quo and resisted reforms that would allow other players to crowd-in to healthcare. The private sector itself had no organised 'voice' for its interests other than individually through informal networks.

Overall problem

The nurse training system was not producing (a) enough nurses, and (b) nurses of good quality. A market needs assessment conducted by Katalyst²⁷ showed that Bangladesh would have to train an additional 2,703 nurses per year in order to reach internationally-recommended standards (an increase of over 100%).

Why wasn't the training system working?

A number of factors appeared to be significant:

- Its image as an unattractive profession: nursing was not seen as a desirable career option because training was outdated and upward mobility therefore restricted. Nursing's image was also undermined by widespread negative professional and social attitudes ²⁸ (see *Box 4*).
- An outdated curriculum: the standard curriculum used by all training institutes had not changed significantly since its introduction in 1954. Important healthcare advances and foreign language skills had not been included. The diploma was not recognised in other countries.

²⁷Similar studies conducted by other organisations (e.g. Bangladesh Health Watch, 2007) showed similar results.

²⁸Hadley et al (2007); Why Bangladeshi nurses avoid 'nursing': social and structural factors on hospital wards in Bangladesh; Social Science and Medicine, Vol 64, Issue 6.



- Scepticism towards the emergence of a more pluralistic training system: though changes in attitude and thinking were emerging at higher levels of government and the donor community, private sector involvement in training was widely-regarded with suspicion.
- Absence of a policy and regulatory framework: inadequate quality monitoring, and lack of transparency over the approval and establishment of new operations hampered the growth and development of private training centres.
- Institutional confusion and inertia: overlapping responsibilities, complex procedures and the incentives of individual players to protect their own 'turf' and keep the status quo made it difficult for individual decision-makers to bring about wider change in the training system.

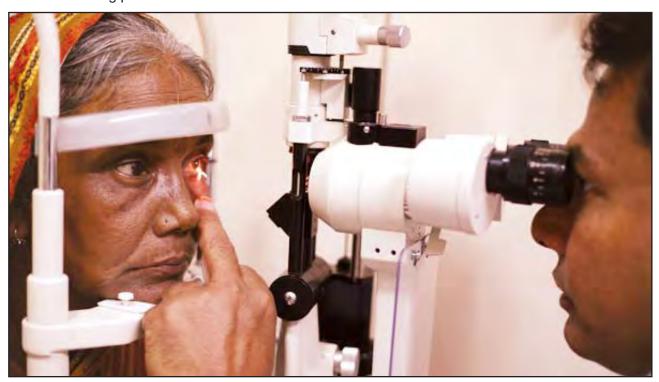
Example 2: Training system for health technologists

Key players and what they did

Three-year diploma courses for various health technologists were provided by around 21 registered private institutes and three government Institutes of Science and Technology. The actual number of functioning institutes was however believed to be much lower. Apart from these, further institutes without official registration (mostly run by NGOs) also provided informal training. In total, around 5,000 students graduated from the registered institutes.

Two bodies fulfilled similar regulatory functions. The State Medical Faculty (SMF) under the MoHFW has oversight responsibility for the registration of training institutes, ensuring the relevance of the curricula for different profession groups, and for supervising student examinations. The two government institutes and 21 private institutes were registered under SMF. The Bangladesh Technical Education Board (BTEB) was formally under the Ministry of Education but acted as an autonomous body that also approved institutes for health technology. Sixty nine private institutes were registered there, of which at least 31 were not operating. For courses on pharmacy, separate permission had to be obtained from the Pharmacy Council.

As in nursing, the CME (see *Example 1* above) claimed responsibility for the development of curricula for health technologists but their actual role was restricted to the two government institutes under the SMF. Representing the private institutes under the BTEB was the Association of Medical Technology Institutes (BAMI) formed out of the emerging friction between the BTEB/Ministry of Education and the SMF/MoHFW. However, in practice, it had limited influence on decision-making processes.





Overall problem

The training system was producing insufficient numbers of technologists and technologists of questionable quality. The shortage (estimated to be 483,000²⁹) of technologists had led many diagnostic centres and laboratories to employ 'health technicians' without any formal training background.

Why wasn't the training system working?

A number of factors appeared to be significant:

- Lack of coordination with both ministries of health (SMF) and education (BTEB) claiming responsibility for the training system the resulting uncertainty undermined the development of private providers' services (see Boxes 5 and 6)³⁰;
- Poor quality standards in a regulatory vacuum: institutes registered under the BTEB did not use a standard curriculum, i.e. their training courses were offered outside any framework that would ensure their quality;³¹
- Weak capacity and institutional inertia: BTEB had limited internal capacity for developing new
 curricula or guidelines for the accreditation and quality monitoring of institutes; SMF had limited
 resources to carry forward curricula and system revisions. The prevailing general sentiment
 against private sector involvement in government circles was not helpful in formulating
 improved collaboration.
- Strict/unclear entry rules: entry requisites for the private sector were unduly stringent, backed by demand for the presence of high facility/equipment requirements.



 $^{^{29} \}mbox{Bangladesh Health Watch (2007); Op. cit.}$

³⁰The Ministry of Education was in fact pointing out that though the BTEB was under its authority, it acted as an autonomous body.

³¹For most health technologist courses offered under the BTEB, only - if at all - the first year syllabus was developed.



Annex 3: Katalyst's intervention costs and outputs

Costs

Category	Costs (USD)	Details
RTM services	325,899	 Staff: 4 full-time staff, 15% time of 2 medical consultants, 25% time of RTM president Fixed costs: office rent, communication, transportation etc.
Katalyst's own costs	82,000	 Staff: 50% time of 1 business consultant, 25% time of 2 further staff Fixed costs: transportation Study visits to training institutes
Sub-total	USD407,899	
Intervention costs	241,144	 Numerous interventions, for example: Contracting of technical experts and organisations for specific inputs Market assessments and other studies RTM field visit Organising roundtables, seminar, workshops
Costs for additional research (non-RTM)	29,000	 Initial sector analysis conducted by SRGB Bangladesh Ltd. Impact assessment conducted in July 2011
Total	USD678,043	

^{*} Excluded from costs are additional expenses incurred by partner organisations such as the MoHFW or training institutions such as State University and Kumudini Hospital (i.e. the above are programme - RTM and Katalyst - costs only)





Outputs

Category	Direct outputs
Research and analysis	 Sector study on private healthcare in Bangladesh Market assessments on nurse, paramedic, and health technologist training systems and medical information services Concept note and proposal on rural healthcare Market briefs on private healthcare in Dhaka and private healthcare (overall) Needs assessment study on nurses in private and public sectors Rural medical practitioner assessment RSA on TMSS HEM model Three surveys on student profiles, hospital needs, and facilities for the urban poor.
Policy guidelines and curricula	 Nursing BSc: Introduced 1 policy guideline, approved 1 curriculum of Dhaka University, 1 ordinance, and 1 examination module (both also from Dhaka University). Katalyst also supported curriculum development of other colleges such as the State University of Bangladesh Paramedics: curriculum of AIMS updated Health technologists: 1 policy guideline (approved by executive committee), 7 curricula approved (lab medicine, radiology and imaging, dentistry, physiotherapy, radio therapy, occupational therapy, sanitary inspectors), 1 curricula (pharmacy) pending Medical assistants: a draft policy guideline was provisionally approved by order of the Director Health Services allowing 29 private institutes to enter the market. The draft policy was significantly used for the formulation of the final policy. Curriculum revision and initiation for policy change to facilitate entry of private sector Community health workers: 1 policy guideline, 1 curricula, and 1 guidebook developed and approved Community paramedics (revised FWV course): 1 policy guideline and 1 curricula developed and approved.
Engaging with the private sector and other training providers	 1 roundtable in cooperation with AIU and Daily Star to promote nursing education in Bangladesh and present advocacy paper to government (press conference) 1 advocacy paper on nursing and paramedics skills development programmes 6 articles pertaining to various issues in nursing published in The Daily Star by AIU Career campaigning organized to promote nursing education and profession Round table, press conference, meet the leaders, workshop and TV talk show organised to create awareness of nursing demand and the image crisis faced by the profession Under the TMSS partnership: Developed 1 ToT module including training materials Conducted 1 ToT for paramedic teachers (TMSS in Bogra) – more planned on TMSS's own account Conducted 20 promotional events ('yard gatherings') with TMSS beneficiaries (to raise demand for the paramedic courses) Two workshops: promoting the HEM model and hiring paramedics among other NGOs and donor community creating awareness among training institutes on the demand for paramedic training and developing buy-in for TMSS's ToT courses Organised rallies, seminars and skit programmes for addressing the image issue of nursing profession on International Nursing Day.



Category	Direct outputs
Engaging with the government	 Numerous workshops and task forces for policy guideline and curricula development with private sector involvement – for example: task force for the development of the Nursing BSc and policy guidelines curriculum workshop for BSc nursing stakeholder workshop for finalisation of policy guidelines to introduce BSc nursing to private sector Stakeholder conference for dissemination of policy guidelines for conducting nursing BSc course in the private sector Through letters to the Advisor to the Prime Minister and secretaries of the ministries, as well as direct meetings, Katalyst raised the issue of interministerial coordination between the resorts of education and health. This led directly into discussions on a paramedic board (an idea instigated by Katalyst).
Other	 Study visits by government officials and RTM and Katalyst members to India and Thailand to study different health technologist institutes, curricula and other relevant documents In July 2011 Katalyst revisited the sector and conducted an impact assessment in order to assess whether interventions in the training system led to creation of income and employment opportunities for young people from a poverty background.







Annex 4: Overall changes in training provider performance

Occupation	Total nu training p		Total seat capacity		Pending applications
	Public	Private	Public	Private	(public/private)
		Nu	rsing (BSc)		
Before	0	0	0	0	-
2008	5	7	275	205	10
2011	9	9	775	260	2
		Post	-BSc Nursing		
Before	1	0	100	0	100
2008	1	0	100	0	100
2011	4	8	500	245	2
		Health	technologists		
Before	2	22	540	2,164	-
2008	3	47	835	4,164	7
2011	7	57	1,245	5,120	12
		Medi	cal assistants		
Before	5	0	550	0	-
2008	7	26	650	1,875	5
2011	8	44	700	2,815	18
		Commu	nity paramedics		
Before	0	0	0	0	-
2011				690 (255	
(began in March	0	13	0	students	9
2011)				admitted to date)	
Community health workers					
Before	0	0	0	0	-
2008	0	9	0	870	7
2011	0	18	0	815	Null*
2011	. 0	18	0	815	Null*

Source: MoHFW, SMEF and BNC, 2009 *No further application/approval





Annex 5: Income streams of SMF (in BDT)

	Courses under SMF 32		
Income stream	нт	MAT	CHW
Affiliation charges – first time	200,000	100,000	20,000
Re-visit of affiliation (in case of non-compliance)	100,000	100,000	20,000
Renewal for affiliation (usually two years, but in case of non-compliance after one year)	100,000	50,000	20,000
Re-visit conducted for renewal (in case of non-compliance)	50,000	50,000	20,000
Penalty fees for renewal delays (per month, for maximum two months)	20,000	20,000	20,000
For change of address of the institution	40,000	40,000	40,000
Registration of HT and MAT courses under one institutional name	40,000	40,000	40,000
Examination fees (on average)	1,500	1,500	1,500



 $^{^{\}rm 32}$ HT - health technologist; MAT - medical assistant; CHW - community health worker.



Annex 6: Selected student profiles

Name	Mustafizur Rahm	an	
Personal and family details	Male , 28 years old, single, from <i>Nilphamari</i> (remote village). He's one of a 6-person family (3 male, 3 female), where the father is the only earning member, farming paddy, wheat, and vegetables on 1 <i>bigha</i> of land. Mustafizur has his <i>Alim Madrasah</i> Board.		
Course, fees, and financing	BDT50,000 for 2 y		gra . Course fees are around rovision for a full, free scholarship the costs.
Plans	He plans to get a	ob within 6 months in a clini	c or NGO near his village.
Family income	BDT7,000	Earning potential	BDT20,000 BDT25,000
Name	Jhumur Emelda	Rosalin	
Personal and family details	a 4-person family	(2 male, 2 female); her fath	bna (remote village). She's one of er farms 2 bighas of land and her as her SSC and is currently in the
Course & financing	BSc Nursing, Kumudini Medical College. Course fees are around BDT300,000 for 4 years, although Kumudini has provision for a full, free scholarship for students from a poor background on the condition that they serve the institution for 2 years following graduation. On this basis, Kumudini Medical College is bearing her costs.		
Plans	_	2 years at Kumudini, Jhumu k to her village home and wo	ur plans to work for a government ork in a nearby hospital.
Family income	BDT5,000	Earning potential	BDT20,000
Name	Mosammat Roka	iya Khatun	
Personal and family details	Female , 18 years old, single, from <i>Nawabganj, Chapainawabganj</i> (remote village). She is one of a 4-person family (2 male, 2 female); her father owns a tailoring shop and her mother is a teacher. Mosammat has completed her HSC and is currently in the first year.		
Course & financing	MAT, Rajshahi Medical Assistant Training School. Course fees are around BDT200,000 for 3 years. Her father sold two heads of cattle to pay for her registration fees and has taken a loan to bear the cost of the course fees.		
Plans	Mosammat plans village home.	to get a job in a governmen	nt or private institution near to her
	BDT8,000 Earning potential BDT15,000 - BDT20,000		



Name	Md. Abbas Uddin		
Personal and family details	Male , 17 years old, single, from <i>Konkadia, Patuakhali</i> (remote village). He's one of a 5-person family (1 male, 4 female); his mother is a farmer and is the sole earning family member. He has his SSC and is now in the first year of training.		
Course & financing	MAT, Medical Assistant Training School, Jhenaidha. Course fees are around BDT200,000 for 3 years. His mother bears his educational expenses and has also applied for a waiver for some of the total amount. She took out a loan from relatives to meet the expenses.		
Plans	He plans to work in private institution near to his home village.		
Family income	BDT3,000	Earning potential	BDT20,000

Name	Nirjhar Mallic		
Personal and family details	Female , 19 years old, single, from <i>Fultala, Khulna</i> (remote village). She's one of a 12-person family (6 male, 6 female). Her parents divorced when she was six years old, so she lives with her mother and her maternal grandparents and uncles. She has her HSC and is now in the first year of her studies.		
Course & financing	HT, Addin Women's Institute of Health Technology, Jessore. Course fees are around BDT150,000 for 3 years. Her maternal grandfather is a small trader, and together with her uncle bears her educational expenses.		
Plans	She would like to work as a teacher in her current institution or elsewhere in Khulna Division, and hopes to get a job within 3 months of graduating.		
Family income	BDT20,000	Earning potential	BDT15,000

Name	Deepak Kumar Sharkar		
Personal and family details	Male , 17 years old, single, from <i>Durgapur</i> , <i>Rangpur</i> . He's one of a 5-person family (3 male, 2 female). His father is a potter and is the only earning member of the household. He has completed his SSC and is in the first year of his studies.		
Course & financing	MAT, Rangpur Medical Assistant Training School, Rangpur. Course fees are around BDT150,000 for 3 years. His father bears his expenses, though Deepak also contributes by giving private tuition. Deepak has also received a waiver for some of the costs from the institution itself.		
Plans	He hopes to get a job in a government hospital near his home town within six months of completing the course.		
Family income	BDT6,000	Earning potential	BDT15,000



Name	Mustafizur Rahman		
Personal and family details	Male , 28 years old, single, from <i>Nilphamari</i> . He's one of a 6-person family (3 male, 3 female). His father cultivates paddy, wheat, and vegetables on 1 <i>bigha</i> of land and is the only earning member. He has obtained his Alim from the Madrasah Board and is now in his first year.		
Course & financing	Diploma in Community Paramedics (HT), TMSS, Bogra. Course fees are around BDT50,000 for 2 years. TMSS has provision for full, free scholarship and discount for students from monga areas so TMSS is bearing his cost as he is from Nilphamari district.		
Plans	He intends to get a job within six months of graduating, and practice as a community paramedic near his village home.		
Family income	BDT7,000	Earning potential	BDT20,000 - BDT25,000

Name	Md. Shohrab Hossain		
Personal and family details	Male , 23 years old, single, from <i>Chaugachha, Jessore</i> (remote village). He's one of a 6-person family (4 male, 2 female). His father and brother are farmers and work as sharecroppers (they do not own land). He has completed his HSC and is now in his first year.		
Course & financing	Community Health Worker, State Community Health Training Academy, Jhenaidha. Course fees are around BDT50,000 for 2 years. He is getting a waiver (funded by the Islamic Foundation).		
Plans	He would like to work in his home village.		
Family income	BDT7,000	Earning potential	BDT15,000

Name	Md. Shariful Islam		
Personal and family details	Male, 22 years old, single, from <i>Shahapur, Ishwardi</i> (village). He's one of a 5 - person family (3 male, 2 female). His brother is a garment worker and the family also receives some money through the pension of his father. They are farmers and work as sharecroppers (they don't own land). He has completed his SSC and is now in his third year.		
Course & financing	HT (Pharmacy), Bangladesh Institute of Medical Technology, Pabna. Course fees are around BDT200,000 for 3 years. Shariful works part-time in the institute as a teaching assistant in order to contribute towards financing his course.		
Plans	He would like to become a teacher.		
Family income	BDT15,000	Earning potential	BDT25,000



Name	S. K. Titu				
Personal and family details	Male , 18 years old, single, from <i>Nagesshar, Kurigram</i> (remote village). He's one of a 4-person family (2 male, 2 female). His father is a farmer and owns approximately 3 <i>bighas</i> of land. He has completed his SSC and is in the first year of his studies.				
Course & financing	HT (Pharmacy), Prime Institute of Science and Medical Technology, Rangpur. Course fees are around BDT75,000 for 3 years. His father sold 1 bigha of land to pay the registration fees, but SK contributes himself by giving private tuition. He has also received a waiver for some of the costs from the institution itself.				
Plans	His paternal uncle will arrange a job for him in a city clinic within six months of graduating from the course.				
Family income	BDT8,000	Earning potential	BDT20,000		

Name	Rehena Parvin			
Personal and family details	Female , 32 years old, divorced, from <i>Bogra</i> . She is one of a 3-person household (1 male, 2 females). Her mother is a health worker. She has completed the first part of her BSc (Hons) and is now in the first year of her paramedic studies.			
Course & financing	HT Community Paramedics, TMSS, Bogra. Course fees are around BDT50,000 for 2 years. Her mother bears the cost of her course, though she has also applied for a full free scholarship. Rehena also gets a 50% discount for being a 1 st batch student.			
Plans	She would like to be a health worker for an NGO.			
Family income	BDT8,000	Earning potential	BDT20,000	

