Abstract

Development organisations have moved from reporting on 'what they do' to addressing 'what difference they make' in an environment that forces them to compete for resources. Thus, assessing their effectiveness has evolved from accountability reporting to results enquiries and to evaluation of the impact of interventions at the end user's level.

The challenge of assessing the performance of multilateral development agencies:
Lessons from WHO programmes in Myanmar and in Nepal

By

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Abstract

Development organisations have moved from reporting on 'what they do' to addressing 'what difference they make' in an environment that forces them to compete for resources. Thus, measuring their effectiveness has evolved from accountability reporting to results enquiries, and to evaluation of the impact of interventions at the end user's level.

To adapt to these changes, most development organizations and donors have adhered to results-based management and use logical framework approaches for their operations. These approaches and systems have recognised usefulness in project planning, although their utility in project monitoring and organizational performance assessment is more contested. The analysis of recent experiences calls for alternative approaches to assessing performance to improve the effectiveness of development and technical organisations at the country level.

This research explores the use of logframes to assess the programmatic performance in a multilateral organization at country level, in the context of an increased focus on results based management. It uses a qualitative methodology to a) assess the comparative advantages and challenges of various assessment tools and systems that WHO uses to measure its performance in EPR in Myanmar and in Nepal; b) address the WHO contribution in terms of results and impact in the area studied; and c) propose options for addressing WHO accountability performance and cooperation effectiveness in EPR at country level.

The two case studies uncover the importance of contextual factors, and stakeholders' perceptions and interactions. They further highlight the role that organisational setting and team profile play in using systems and tools to measure programmatic performance. Logframes proved useful for planning and financial accountability, although they confronted major difficulties when assessing the core contribution of the teams to the programme achievements and stakeholders' expectations.

The research contributes to the understanding of how routine performance assessment systems work in practice. The comparison of the findings in the two countries raises institutional issues and offers the possibility for organizational learning. Finally, the research proposes alternative options that WHO may adopt to measure its programmatic performance in countries.

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Declaration of candidate's own work

I have read and understood the definition of plagiarism and cheating given in the Research Degrees Handbook of the London School of Hygiene and Tropical Medicine.

I declare that I conceptualized, carried out, analysed and wrote up the research reported in this thesis. I did not source out any part of the research or the thesis. This includes interviewing all participants mentioned in this thesis, transcribing or analysing the interviews.

I have acknowledged quotations from the published or unpublished work of other people.

The present work is my own, although as credited in the acknowledgement section I owe much to those professionals mentioned, without whom this thesis would be of much lesser value.

Signed:

Maria José Santamaria Hergueta
Date: December 2008

List of acronyms

DAC	Development Assistance Committee
DrPH	Doctor of Public Health
EPR	Epidemic Preparedness & Response/Communicable Diseases Surveillance & Response
GOARN	Global Outbreak Alert and Response Network
HIV/AIDS	Human Immunodeficiency Virus/Acquired Immune Deficiency Syndrome
IHR	International Health Regulations
LSHTM	London School of Hygiene and Tropical Medicine
MOH	Ministry of Health
NGO	Non Governmental Organization
OECD	Organization for Economic Cooperation and Development
SARS	Severe Acute Respiratory Syndrome
USAID	United States Agency for International Development
WHA	World Health Assembly
WHO	World Health Organization

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Integrating statement

The Doctor of Public Health (DrPH) programme at the London School of Hygiene and Tropical Medicine aims at equipping candidates "with the skills crucial for leadership roles in public health policy and practice rather than in research"[1]. It considers that public health professionals need to understand and adapt scientific knowledge in their work to achieve results through their organisations.

The DrPH consists of three components that complement and build on each other. The first is the Taught Component with six study units. The equivalent of three study units is compulsory and addresses issues on Evidence-based Public Health practice and on Leadership, Management and Development. The remaining three taught elements are selected according to the interests of each candidate. The second component is the Professional Attachment that provides the opportunity to analyse the operation of a public health organisation and requires the production of a Professional Attachment Report on the organisation studied. The third component is the Research Project aimed at helping the candidate to learn more on the role of research in public health practice and the different stages of research.

My background is medical and I have been working most of my professional career in public health, and most of it serving in public sector institutions. My roles changed over the years and I became increasingly interested in the role that organisational settings could play in delivering results. After working on infectious diseases for a number of years, I decided to go back to study. I joined the LHSTM for a Master of Science on Health Planning, Policy, and Financing, where I learned about theories on organisational management. Later, I considered joining the DrPH to understand better the role of research in practice and the mechanisms through which organisations can become more effective. Currently I work at the Office of Internal Oversight Services of WHO. I contribute to the improvement of its operations by looking critically at technical and country programmes.

I joined the DrPH in September 2003 on a part-time basis. I completed the core courses in evidence-based public health practice, and on leadership and management. I complemented this compulsory taught component with study units for which I took exams on Organisational

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[1] Overview of DrPH program: http://www.lshtm.ac.uk/prospectus/research/drph.html, accessed 20.10.08

Management, Logical Models for Decision Making, and Health Information for Decision Analysis. In addition, I audited the study units on Principles of Social Research and on Qualitative Methodologies. The purpose was to gain knowledge and skills to integrate a social science perspective in my research.

I organised my Professional Attachment in Lebanon from September 2005 to February 2006 and looked at the WHO Country Office from a results-based organisational perspective. This gave me the chance to observe and analyse the factors under which that office delivered results and what affected them, including changes in leadership, priority setting, team dynamics, resource allocation, or the relations with other levels of the Organisation. During this time, I was able to apply some of the organisational theory that I had learned during the taught component and to gain skills in qualitative data collection and analysis.

One of the things that became apparent in Lebanon was the difference in importance that the WHO and its team attached to the tools and systems that the Organisation uses to manage its programs. At times the country team perceived these tools and systems as bureaucratic requirements that had little impact on their work methods. At the same time, the country team was going through a process of change and therefore considered it useful to explore options for using these tools and systems more meaningfully.

I therefore decided to deepen my understanding on how the tools and systems that organisations use routinely can contribute to delivering better technical assistance in countries.

For this purpose, I chose to look at the use of these tools and systems in two different country settings from a technical program perspective. I focused my research on the program of epidemic preparedness and response because of my background in infectious diseases management in the past. Moreover, my choice was influenced by the characteristics of this program, which include the development of the surveillance system and public health laboratory network, in addition to responding to epidemics.

The fieldwork in Myanmar and in Nepal taught me much, including working without those things that we take for granted when we work in organizations!. Being a DrPH candidate meant shifting roles from expert to a self-funded research student, using new instruments to get the work done, and learning from the situations much more thoroughly than what professional

opportunities allow us to learn. It surprised me how open the interviewees were and how frank their opinions were. Everyone –including WHO staff in both countries- seemed to have ideas of what WHO did well and what needed to improve. They also suggested several options that corroborate the need to shift the focus of analysis of performance measurement of a single organization towards impact assessment. By doing this, they raised a more profound question about the position that WHO has towards alignment and harmonisation of its support, and about the role that it should play vis-à-vis its stakeholders.

Probably the most important lesson that this DrPH has taught me is that organizations learn when they want to excel. Organizational improvement is about self-questioning, taking risks and allowing criticism. I also learned that 'tone from the top' is as important as having a critical mass of individuals that commit themselves to change. Each is indispensable but alone none suffices to change the way organizations work. Through this research, I understood better how results-based management work in practice. I could further see the importance of integrating views from others when proposing options for improvement.

Through comparison of the findings in the two countries, I raise institutional issues that offer the possibility for organizational learning. I contribute some alternative options that WHO may adopt to measure its programmatic performance in countries as well. Finally, the research contributes to the current debate on results-based management and the use of logframes in organizations, and on the implementation of global initiatives in local settings.

I discussed the dissemination of the findings of the research with senior WHO staff. They suggested that the research be packed and presented to senior managers in the Regional Office for South East Asia and to concerned staff in headquarters. They also recognised the need to improve the quality of indicators used to assess EPR programmatic performance and the WHO core functions at country level, because *"Otherwise the problem will continue to exist with WHO remaining inward-looking in measuring its results"*.

Finally, I will prepare three articles for peer-reviewed journals. A first paper will present the practice of results-based management, including the use of logframes in the two countries. The second paper will discuss suitability of results-based management approaches to EPR in countries. A third paper will reflect on my experience in using schematic representations in evaluations.

Introduction

The primary concern of this research is the improvement of performance in development (and/or international) organizations. It considers that achieving results is one attribute of effective organizations, and therefore, having appropriate means to measure them is essential. In particular, the research focuses on the utilization of the tools and systems that organizations use to measure results, and on how these can contribute to deliver better support at the country level.

Over the last decade, there has been increasing pressure on publicly funded development organizations to demonstrate efficiency and effectiveness. This is partially due to the uneven pace at which the needs and number of actors have grown in relation to the speed at which resources have become available. The need for more transparent governance has contributed as well. As a result, competition among organizations has increased, and so has the need to adapt their systems to demonstrate credibility to their stakeholders (Lavergne and Branch 2002; Roche and Kelly 2004).

The focus of attention of organizational efficiency and effectiveness has evolved as well. There has been a shift towards the end user's perspective. This *'customer-isation'* has changed the paradigm in organizations. Rather than accounting for how they spend their budgets or what activities they do, development organizations now need to reflect on the changes that they induce in peoples' lives.

To reflect the needed changes, most development organizations shifted to management approaches based on results. The basis of the results-based management is a logic model showing the sequence of inputs, outputs, outcomes and impact for the policy, program or initiative. This type of management had a long tradition in the private sector, although after four decades it infiltrated the public sector and now its presence is global and multi-sectoral. At present, nevertheless, there is criticism about the inability of results-based management to induce the organizational change needed in the development sector (Roche and Kelly 2004; Bakewell and Garbutt 2005; Davies 2005).

Responding to pressure from stakeholders, WHO undertook its organizational reform in the late 1990s, and adopted a "results-based" management approach in 2000. Through this approach, WHO expects that the results achieved at country level will influence its overall management, including its agenda of work. Therefore, measuring results of programmes at country level is critical to WHO, and so are the accuracy and precision with which staff use tools and systems. In particular, it is important that staff perceive these systems and tools as useful; that they accept them; and that they use and apply them correctly.

The research aims to study the systems and tools that WHO uses to assess its contribution to national EPR programmes at country level. Improvements to these systems and tools may help WHO to become more effective in contributing to EPR programmes. In addition, better understanding of these systems and tools will contribute to the debate on the appropriateness of the methods and approach for measuring organizational performance.

This research explores the use of logframes to assess the programmatic performance in a multilateral organization at country level, in the context of an increased focus on results based management. Its specific objectives are:

> assess the comparative advantages and challenges of various assessment tools and systems that WHO uses to measure its performance in EPR at country level;

> address the WHO contribution in terms of results and impact in the area studied; and

> propose options for addressing WHO accountability performance and cooperation effectiveness in EPR at country level.

By looking at how WHO measures and reports its support to the national programme of Epidemic Preparedness and Response (EPR) in Myanmar and Nepal, this research analyses the strengths and gaps in the practice of results-based management. This analysis serves to explore several options that organizations such as WHO could consider when assessing their programmatic performance in countries.

The research is timely because of the momentum that the logic behind results-based management has gained among the international development community. It is also important because it addresses issues that other development organizations have identified as needing

further research. The research contributes to the understanding of how results-based management works in practice in two countries and raises issues for further investigation. The thesis comprises seven chapters. Chapter 1 sets out the background to the study showing what guides WHO work in countries and in EPR, and its progress implementing the results-based management approach. Chapter 2 includes the literature review that served to identify the leading questions for the research. The review focused on (a) the work of WHO at country level and how it is assessed; (b) the support to surveillance and response systems addressing communicable diseases; and (c) the assessment of development effectiveness with emphasis on country level. Chapter 3 comprises the research framework and methods, in particular, the research approach, its aims, objectives and boundaries, and planned outcomes. Chapter 3 also includes the methods, data collection and analysis, quality of research and limitations of the study, as well as its ethical considerations.

Chapter 4 and Chapter 5 present the two country case studies, Myanmar and Nepal. Both case studies follow a similar structure. Both chapters introduce the country, then scope to the major events related to infectious diseases and epidemics, the context, and the interactions among the main stakeholders involved in addressing them. The chapters then present what the stakeholders perceive as "results" in addressing the major events and in the national programme of EPR; and the stakeholders' perception of WHO contribution to these results. The chapters continue with the organizational aspects of the WHO Country Teams and with those related to the implementation of results-based management. Finally, the chapters summarize the main issues of each country study.

Chapter 6 discusses the main findings of the two case studies in relation with the tools and systems to assess performance. These issues include contextual factors, stakeholders' interactions, and the organization of the WHO country teams. Chapter 6 also compares the conceptualization of performance in EPR, how WHO assesses its programmatic performance, and what issues arise when using logframes in each country.

Chapter 7 comprises the concluding remarks of the research in relation to the literature, the framework of the research, and the methodology used. Chapter 7 also includes some recommendations for broad application in further research or in other organizational settings; and more specific options that WHO may consider when assessing its programmatic performance at the country level.

1 Background

This chapter looks at the policy drivers that affect the work of WHO at the country level, its work on EPR, and its organizational management framework, to illustrate the context in which performance assessment takes place. It also presents several issues related to the systems used to measure the programmatic performance of WHO in countries that affect the implementation of results-based management.

1.1 WHO work at country level

The constituency of WHO consists of 193 Member States that collectively guide the work of the Organization by the decisions they take annually at the World Health Assembly in Geneva. The resolutions that this Assembly adopts are adapted to the needs of the Member States through the WHO Regional Committees. WHO has limited means to force its Member States to implement the agendas[2] for which they are responsible. The legitimacy of WHO lies largely in the collective agreements of its Member States.

To assist its Member States in achieving the goals of the World Health Assembly, WHO maintains a Secretariat, with staff working in 145 country offices, six regional offices, and its headquarters. In addition, WHO supports its Member States through technical networks, collaborating centres, and individual experts. The work of WHO is organized by technical programmes grouped under Areas of Work that are reassembled in four domains[3] (WHO 2006).

WHO has identified six core functions that guide its work for the period 2008-2015 (WHO 2006). These six core functions take a different balance in each country, depending on the needs put forward by WHO's main counterpart - the Ministry of Health (MOH), and other partners:

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[2] Except in special situations of critical international importance, and for the revised IHR of 2005, that bestow enforcement authority to WHO.
[3] Including Essential Health Interventions; Health Policies, Systems and Products; Determinants of Health; and Effective Support to Member States.

(i)   Provide leadership on matters critical to health and engage in partnerships when needed.

(ii) Articulate ethical and evidence-based policy positions.

(iii) Promote and monitor the implementation of norms and standards.

(iv) Shape the research agenda and stimulate the generation and use of valuable knowledge.

(v)   Provide technical support, catalyse change and develop sustainable institutional capacity.

(vi) Monitor the health situation and assess health trends.

The work of WHO at country level is organized around biannual plans of action. These plans respond to the unique public health needs in each country. However, all operations in countries share specific commonalities. For example, WHO does not implement programmes directly and therefore, achieving results depends on its implementing partners. Another characteristic unique to WHO is its budget structure. Other international agencies working at country level have full control of their resourced plans. However, WHO country teams do not know what the total budget will be for the biennial plan, since they can control only the regular budget (less than 50% of total resources in many countries) at the start of the planning cycle. A third characteristic of WHO work at country level is a "cherry-picking" effect at two levels. The first level is internal to WHO, where financial partners influence WHO priorities through extrabudgetary allocations. The second level happens at country level and results from WHO working through consensus, whereby local partners impose their priorities.

1.1.1 WHO Constitution

The Constitution (WHO 1946) outlines 22 functions of WHO to obtain its objective, namely, the attainment by all peoples of the highest possible level of health   (See Annex 2, page 182). The Constitution provides a broad space for WHO work in countries. While having a holistic approach to health and having multiple programmes to address health issues is advantageous, it constitutes a challenge as well. This is because at present, a considerable proportion of the activities of the plan of action depend on extrabudgetary resources, while the conception of these plans results mainly from negotiations between WHO and its main counterpart - the MOH. Therefore, there could be a mismatch between the priorities of the donors, and those of the MOH and the WHO Country Team. At times this results in plans that are not perceived to be relevant to local needs, or that are not implemented as planned. Examples include the skewing of funding towards specific diseases such as polio eradication or HIV/AIDS and

tuberculosis control, disregarding other needs of the health sector development such as the strengthening of health systems and disease surveillance systems.

1.1.2 Country Focus

As part of the wider WHO reform of 2000, the governing bodies of WHO agreed on the strategic directions that the Secretariat should follow to become more effective, in particular at country level. The Country Focus Initiative aims at countries exerting a greater influence on global and regional public health interventions (See Annex 2, page 182)

The key instrument of the Country Focus Initiative is the Country Cooperation Strategy. The national health authorities, partners, and WHO define a mid-term strategy (four-five years) for WHO in each country. This Country Cooperation Strategy combines a realistic assessment of country needs with WHO corporate strategy options, and guides the identification of the biennial plan of action in each country (Figure 1).

Figure 1. Country Cooperation Strategies and managerial processes in WHO
(Red arrows illustrate focus on results)
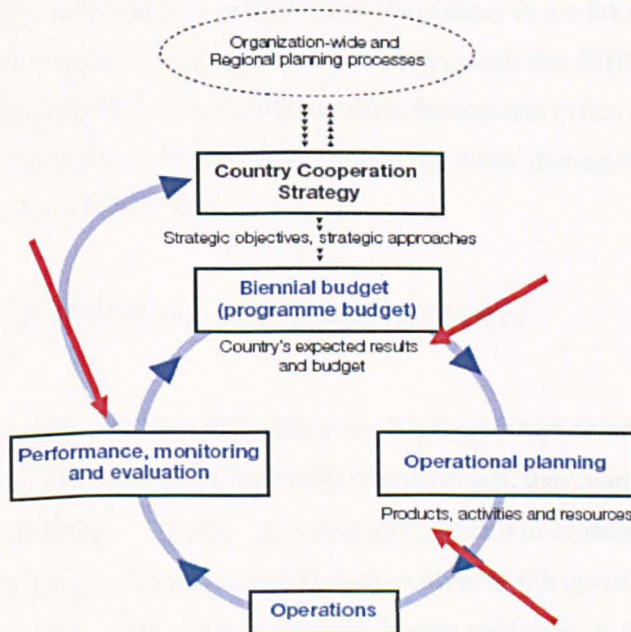
Source: WHO Country Cooperation Strategies, A guiding Framework (WHO 2005)

1.1.3 Trends in harmonization and alignment of development assistance

There are increasing efforts by donors and development agencies to deliver assistance more effectively. Illustrations of these efforts are harmonization and alignment promoted by the Development Assistance Committee of the Organization for Economic Cooperation and Development (OECD/DAC)[4], the reform of the United Nations[5], or the International Health Partnership. These initiatives call for the alignment of WHO work to the country health priorities and to WHO priorities at regional and global levels; and for coordinating with others to achieve health outcomes. WHO adopted a resolution at the World Health Assembly in 2005 (See Annex 2, page 182). There have been reports on major gains achieved in getting donors and recipient countries to agree on the principles of harmonization and alignment, although the progress at country level has been slow (Conway, Harmer et al. 2008).

The WHO country teams participate in stakeholder networks within and outside the United Nations Country Team. Examples include the national and regional coordinating mechanisms that exist on Vaccine-Preventable Diseases (Interagency Coordinating Committee), or malaria, tuberculosis, and HIV/AIDS (Country Coordinating Mechanism, 3-Diseases Fund). Moreover, in other countries, the harmonization of partners' support is progressing through sector-wide approach strategies (SWAP), and the country teams take part in these processes increasingly. Nevertheless, the evaluations on country work that WHO conducted in 2004 concluded that there should be more guidance from the regional office level or headquarters on what is expected from WHO country teams and wider sharing of WHO experiences from other country teams (WHO 2004).

1.2 Epidemic alert and response

Endemic and epidemic infectious diseases disrupt communities considerably because, in addition to affecting the health of individuals, they alter the socioeconomic conditions and wellbeing of families, and constitute a hazard to broader population groups. Responding to epidemics distracts resources from routine health operations and impacts negatively on the economy of the country affected. Recent epidemics of Severe Acute Respiratory Syndrome

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[4] OECD/DAC selected 14 countries as pilot for harmonization and alignment at the Paris Declaration in 2005. Last high level meeting on aid effectiveness took place in Ghana, 2008 (OECD/DAC 2008).
[5] The development of the Common Country Assessment and the United Nations Development Assistance Framework exemplify these efforts among the United Nations agencies in countries.

(SARS) and dengue, or threats of pandemic influenza illustrate the complex and resource-demanding systems that countries need to fight infectious diseases, and in particular those that have a high epidemic potential.

Communicable disease control was one of the *raisons d'être* for WHO, and has long been the backbone of WHO work at the country level. Strengthening systems for surveillance and response to infectious diseases, in particular to those with a high epidemic potential is a priority for the current General Programme of Work of WHO (WHO 2006).

The work of WHO in epidemic preparedness and response (EPR)[6] in countries varies considerably and is shaped by the pattern of infectious diseases, the resources available (through WHO or other stakeholders), and the EPR national programme. EPR national programmes vary from country to country and depend on the priority and the resources that the country assigns to them, the performance of the health surveillance system and its links to the rest of the components of the health system, and other political processes (decentralization).

The work of WHO in EPR in countries is highly visible. In the country evaluations that WHO has carried out since 2004, MOH staff and partners mentioned the fight against SARS, pandemic influenza[7], and hemorrhagic fevers as among the most effective support from WHO. Nevertheless, the perception of senior MOH staff on the alignment of WHO support to national public health priorities, rates lower for EPR than for disease specific programmes such as those on tuberculosis or malaria (WHO 2005; WHO 2006).

1.2.1 Integrated disease surveillance and response

In view of the difficulties that countries were facing in developing systems to detect and fight infectious diseases, the WHO Regional Office for Africa launched the Integrated Disease Surveillance and Response initiative in 1998. Later, this initiative was expanded to countries in the WHO South East Region and to other countries (WHO 2003). The initiative aims at improving the availability and use of surveillance and laboratory data for controlling priority infectious diseases in terms of morbidity, mortality, and disability (See Annex 2, page 182).

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[6] Called 'Communicable Diseases Surveillance' or 'Epidemic Alert and Response' in different bienniums.
[7] The document uses 'pandemic influenza', 'human avian influenza', 'avian flu', or 'avian influenza' generically for Human H5N1 avian influenza infection.

Thirty countries have been implementing the WHO Integrated Disease Surveillance and Response initiative after adapting it to the national contexts. Lessons learned from countries identified four critical elements that surveillance systems need to respond efficiently to infectious diseases of high epidemic potential: (a) training in epidemiology; (b) laboratory strengthening; (c) improved communications infrastructure; and (d) attention to the overall health care sector (WHO 2000). WHO proposed a framework for evaluating the impact of surveillance and response systems (WHO 2001; WHO 2004).

At present[8], the priorities of the Integrated Disease Surveillance and Response initiative include its introduction at district level, the development of national capacity to respond to epidemics, and the identification of programmatic synergies with the Revised International Health Regulations (2005). Coordination of Integrated Disease Surveillance and Response initiative with other systems such as the Global Outbreak Alert and Response Network (GOARN) needs strengthening as well.

1.2.2 International Health Regulations

The IHR are a legal instrument binding those WHO Member States that have not opposed them, and those non-WHO members that have agreed to be bound by them. The IHR were revised at the WHA in 2005. Their purpose is "to prevent, protect against, control and provide a public health response to the international spread of disease in ways that are commensurate with and restricted to public health risks, and which avoid unnecessary interference with international traffic and trade"[9] (See Annex 2, page 182).

The IHR (2005) has renewed the mandate of WHO and its Member States. In particular:

(a) Countries "are required to develop, strengthen and maintain core surveillance and response capacities to detect, assess, notify and report public health events to WHO and respond to public health risks and public health emergencies"; and

(b) WHO "will collaborate with countries to evaluate their public health capacities, facilitate technical cooperation and logistics, and mobilize resources for building capacity in surveillance and response".

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[8] WHO (AFRO) Integrated Disease Surveillance and Response partners meeting 2006, Atlanta, USA (in WHO/CDS/EPR/LYO/2007.2).
[9] Revision, WHA58.3, 13.1, 23 May 2005.

These directions provide the framework for WHO support in countries and could be used as a benchmark to assess the quality of assistance provided.

1.2.3 Asia Pacific Region Strategy on Emerging Diseases

The Asia Pacific Region Strategy on Emerging Diseases 2005-2010 guides the action to protect the populations of countries of the WHO South-East and Western Pacific regions against infectious diseases with high epidemic potential (WHO 2003) (See Annex 2, page 182). It urges WHO to assist with "the collection of baseline country data or country assessment, so that public health officials know where their countries stand" and requests that WHO support be aligned to the national plan on emergent diseases. At its first meeting held in 2006, the technical advisory committee recommended that "outputs, outcomes and indicators be defined", and that "relations between the Asia Pacific Region Strategy on Emerging Diseases and the WHO plan of action to support this Strategy be clearly explained" (WHO 2006).

The Asia Pacific Region Strategy on Emerging Diseases is aligned to the IHR (2005), and builds on the WHO initiative of strengthening infectious diseases surveillance systems. It considers harmonization and alignment of technical cooperation in countries, and recommends that WHO operations be managed by results.

1.2.4 Global Outbreak Alert and Response network

WHO established the GOARN in 2000 to contribute to global health security. It aims at combating the international spread of outbreaks, delivering timely technical assistance, and contributing to long-term preparedness through capacity-building (WHO 2008) (See Annex 2, page 182).

1.3 Assessing performance at country level

Assessing WHO performance in countries is challenging because the scope of its work is broad (each plan of action contains 20-30 programmes) and multifunctional (see page 17). Country teams report on progress of their biennial plan of action routinely through the mid-term review and end-of-biennium assessment reports, as well on an *ad-hoc* manner. The reports external

and/or internal, include financial aspects, operations, and results. Table 1 below illustrates these different assessment systems by periodicity and consumption audiences.

Table 1. Assessment on results of WHO work in countries

		Consumption	
		Internal	**External**
Timing	**Routine/ periodical**	Mid-Term review of plan of action (after 12 months). End-of-Biennium report (24 months)	Country Annual reports (public advocacy). Periodical newsletters (country work, programme). Annual reports of global partnerships
	Ad-hoc	Technical missions to countries (regional office, headquarters, consultants). Country performance audits. Operational audits.	Country reviews and ad hoc surveys. Programmatic evaluations. Global partnerships evaluation reports. Peer-reviews (WHO, national programmes) Report to donor agencies on specific projects.

Financial reporting deals with the resources management invested in the country's plan of action. Details such as timing and categories of expenditure by programme or reprogramming of activities are included here. This reporting is supported by the Administration and Financial Information System. Partially integrated with it, is the Activity Management System, which monitors the activities and processes within the plan of action. Country teams, regions and headquarters use these two systems to monitor the outputs and Office-Expected Results of their plans of action. Although there are plans to connect the systems that operate at the three levels of WHO[10], they are run independently at present.

In practice, performance[11] monitoring is led by the origin of resources, rather than by where the results are expected. WHO support to a country is not limited to the country's plan of action, and includes support from the regional office and headquarters level, WHO collaborating centres, and networks such as the GOARN. At present, nevertheless, there is no routine integrated monitoring of this *additional* contribution in terms of financial contribution for technical activities, costs of technical assistance, or other support directed to a country (e.g. a 'One Country Plan').

The above results in a mismatch between the assessment of the resources invested in the country's plan of action and the WHO contribution to that country. On the one hand, not all the WHO resources in a country are accounted for in that country (undervalued WHO investment);

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[10] Through the Global Management System, whose plans for rolling out start in 2008.
[11] See Annex 1 for definition of terms used in this research

and on the other hand, not all the contributing parties are accounted for in the achievement of expected results (overvalued WHO country office attribution).

The example in Table 2 illustrates a hypothetical WHO Country Office that reported having spent resources in several areas of work for which it reported activities implemented (proxy for "results"). Those areas of work for which the WHO country office reported "results" but invested no resources, would reflect an overvalued attribution to this office in the results achieved, since others also "contributed". Those areas of work for which resources are spent and activities implemented, but not reported (resources spent, but no reported activity) could result in potential losses if management by results were applied. Those areas of work that had planned activities but that were not implemented and resources not spent could reflect an inappropriate planning.

Table 2. Reported activities and use of resources at country level, WHO hypothetical country

Reported expenditure from a WHO Country Office

		Yes	No
Reported activity implemented	**Yes**	Organization of Health Services HIV/AIDS, Malaria Epidemic Preparedness/Response (EPR) Immunization and Vaccine WHO Country Office reports reflect what it does	Tuberculosis <regional office, headquarters> Non-Communicable Diseases <regional office> Child and Adolescent Health <regional office> Research Policy and Promotion <MOH> WHO Country Office reports reflect contribution from others without crediting them clearly ("overvalue")
	No	Health & Environment Essential Medicines WHO Country Office reports are incomplete ("under-reporting")	Injury Prevention and Rehabilitation Info Management and Dissemination WHO Country Office plans of action are not implemented

Source: *WHO Evaluation & Performance Audit, Office of Internal Oversight Services (several reports), 2007.*
< > = Major contribution from others, such as WHO regional office, headquarters, or MOH

1.3.1 Results-Based Management

As part of its organizational reform, WHO changed its approach to management in 2000. The basis of this approach is a logical framework that links inputs to results, and where results become the basis for management. The results-based management framework (Figure 2, page 26) "is a logical structured approach to define what WHO will do, how it will do it and what resources are required to achieve those results, ... it enables WHO to better demonstrate results

and exhibit a greater focus within and across programmes, ... and "it demonstrates greater transparency and accountability of programme management" (WHO 2006).

There has been considerable progress in the development and use of new systems and tools. This includes a set of systems to manage WHO financial resources, human resources, operations, and others. Since the adoption of these new systems, implementation guidelines have been produced and training for staff has been made available at all levels. However, the quality and quantity of training was variable and refresher training and training for new staff was not systematic due to the lack of funds and to the priority that each Regional Office attached to the new systems.

Figure 2. WHO Results-based Management Framework
(Red arrows illustrate focus on results)
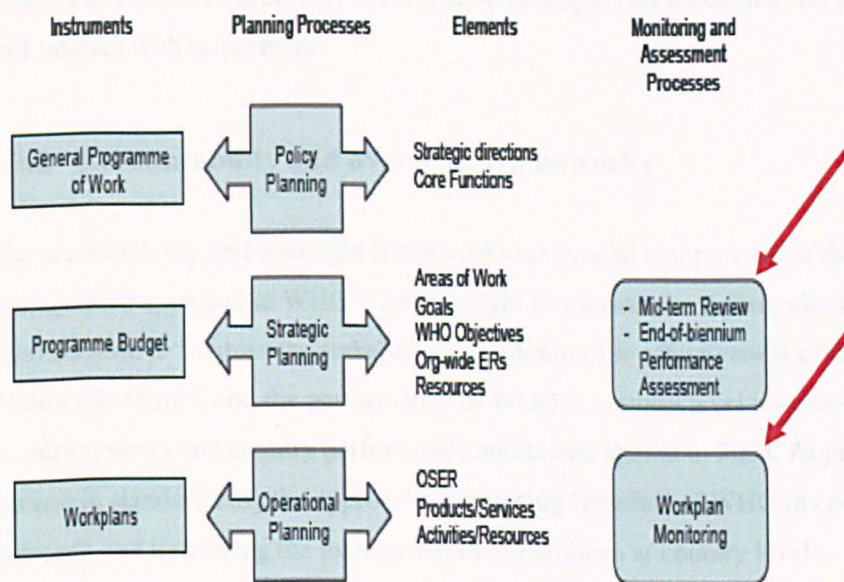
* As applicable for 2004-2005

Source: WHO Performance Monitoring and Assessment Guidelines (WHO 2004)

The Activity Management System at global level reflects all areas of work and corresponds to what WHO needs to address throughout its networks to support countries achieving their engagements at the World Health Assembly. For example, the area of work of EPR for 2004-2005 (WHO 2006) at global level consisted of one organizational objective and one indicator linked to 5 Organization-wide expected results and 10 indicators with baselines and targets to

assess their achievement (See Annex 2, page182). These Organization-wide expected results are then adapted to the regional setting. For example, the adaptation of the above to the regional setting of South-East Asia included 2 regional expected results and 9 indicators with baselines and targets. It is at regional level that strategies are identified (for example, the Asian Pacific Strategy on Emerging Diseases). Finally, WHO country offices address the country needs through their plans of action (office-specific expected results, indicators, baselines).

WHO regional offices provided clear guidelines in 2004 on how the plans of action for 2006-2007 at country level should be planned for and how the end-of-biennium report should be completed. At country level, there is a progressive use of systems and tools designed under the results-based management framework. Nevertheless, there are differences in how WHO country teams understand critical terms, such as "country results", and "office-specific expected results". This understanding and way to report "results" is important because it affects how WHO resources at country level will be managed and accounted for, and also how WHO will interact with its partners.

1.3.2 Accountability and oversight frameworks

The accountability and oversight frameworks are crucial components of the results-based management approach at WHO. The oversight framework is of particular importance at country level because it "enables the stakeholders to monitor the effectiveness of the Organization". Within this framework, the performance of WHO at country level is assessed through *ad hoc* country reviews and country performance audits that started in 2004. At present, there is an interest in standardizing the approach to assessing "results" of WHO in countries to roll out the approach and improving the management of operations at country level.

Summary

In 2000 WHO went through major reforms including the shifting of its approach to management and its work at country level. The latter resulted in the identification of a Country Cooperation Strategy to guide the plan of action in each country. The work of WHO is highly dependent on each country context, since unlike other organizations, WHO operates mainly through its national counterparts. Unlike other bilateral or funding networks, WHO is primarily

a technical partner and only few elements of its plan of action serve to fund selected activities and initiatives. The harmonization and alignment processes that coexist with national processes of rationalization of resources affect how WHO works in countries as well.

In the area of EPR, WHO support depends on the pattern of communicable diseases prevalent (and those emergent), the surveillance and response systems to protect the populations against them, and the MOH duty of each country to assure international health security. This support is aligned with the Revised IHR (2005) and with regional initiatives (e.g. Asian Pacific Strategy on Emerging Diseases, Integrated Disease Surveillance and Response).

WHO adopted a new management by results approach in 2000. However, its implementation at country level is highly variable. There is still a need to develop and integrate the different components of the systems, and to train the staff further in the proper use of the tools. The dependency of WHO on extrabudgetary resources influences its management by results considerably, converting it into management by resources in practice. There are differences in reporting approaches of programmes. In some cases there are distortions because there is no explicit link among inputs, actions proposed, targets and results from regional office and headquarters to the plan of action of the WHO Country Office. Failure to acknowledge other stakeholders' collaborative interventions in the plan of action render the Country Office expected results too ambitious as well. Both actions underestimate the organizational country support grossly.

2 Review of the literature

This chapter presents the method used for the review of the literature informing this research. It then provides more specific details of its initial phase, and summarizes the issues that are relevant for the study.

The literature review was gradually constructed and extended from February 2007 to April 2008. It followed a multiphase process and accompanied all stages of the research. The literature review is not presented as a stand alone work, but rather, integrated in the different parts of the thesis. The initial search served to inform this research with respect to its three main themes. It was selective and focused on the work of WHO at country level, and on issues related to EPR and to performance assessment in development assistance. I complemented the material consulted with further searches on the methodological approach of the research (Chapter 3). The second phase of the literature review focused on the two countries studied, on the major events of infectious diseases and epidemics, and on the factors that affected their control. This review was used to deepen my understanding of the case studies' findings (Chapters 4 and 5). The final phase focused on the specific issues from the case studies related to performance measurement or organizational management. This review guided the discussion of the research findings and its concluding remarks (Chapters 6 and 7).

The present synthesis has relied upon a selective review of peer-reviewed literature (including PubMed, Web of Science, EMBASE and other key databases), reports or guidance documents from various agencies (such as WHO, World Bank, or OECD), and relevant grey literature. The search included medical subject headings and text words related to the topic of the research used alone or in combination. Annex 3 in page 185 provides an overview of the databases consulted and the search terms used. Searches for literature continued through bibliographies of key references. Hand searches for additional documents at the libraries of the LSHTM, WHO Country Offices of Myanmar and Nepal, completed the material consulted.

The review included entries using English text (or abstracts), and excluded those entries with non-English abstracts. Only studies on human populations were included, and animal studies excluded. The criteria for inclusion with respect to the study type considered narrative reviews,

grey literature, reports, and practice guidelines. The research excluded letters and editorials. Other categories where criteria for inclusion/exclusion applied were the topics of interest. For example, the major events that the interviewees of the countries studied mentioned (such as cholera, or avian influenza) were used as inclusion criteria; and any other material on diseases that the interviewees did not mention as major events/epidemics was excluded. Other topic of interest for which the review was progressive refers to performance assessment. The initial review was concentrated on results-based management, and later it was enlarged to specific aspects in its current practice (such as the use of logframes) by different actors (such as NGOs). Therefore, although the initial review was much limited to WHO or to results-based management related topics to inform the research, the criteria for inclusion were enlarged to capture experiences as the research progressed and issues became more evident. In this respect, although the initial sub-themes were identified deductively, the overall discussion of the research addressed sub-themes identified inductively (such as the role of WHO leadership in countries, or the individual performance management).

The initial search yielded 119 entries that were further screened to 30 after reading their abstracts. The majority of the available literature informing the research in this chapter is opinion-based, with some analytical studies as well as some agency reports that are non opinion-based. Owing to the scant literature relating to the topics considered, it was difficult to provide a solid background to the study with sufficient references specific to WHO, and references from other organizations were included. In the other phases the opinion-based articles abound, although there are some descriptive and analytical studies. In particular there are articles referring to major events in the countries studied, or to experiences of organizations managing by results and using logframes as management tools. However, there was no major empirical research among the literature reviewed used in this research.

2.1 On the work of WHO at country level

For WHO, country level work is the number one priority (Kickbusch 1995; Siddiqi 1995; Lucas 1998; Horton 2002), and many perceive that WHO enjoys a high credibility with the MOH (Murray 2005). Murray argues that this relates to its democratic governance, with Member States sitting on WHO governing bodies at global and regional levels, and a close working relationship; and on the technical and political legitimacy of the programmes that WHO proposes to countries based on sound science and support from the academic community. The

legitimacy of WHO would be less in higher income countries, with its main influence being on the development community (Murray 2005).

The work of WHO in countries has been often criticized for being too broad (LSHTM 1997; Lucas 1998) and it has been recommended that WHO focus its support in countries on evidence-based public health policies (McMichael, Waters et al. 2005), to increase the effectiveness of its support. This is reflected in the Country Cooperation Strategy documents that suggest a concentration of WHO country resources in "selected areas where WHO has comparative advantage". At the same time, however, the Country Cooperation Strategy provides the medium-term vision of WHO in a specific country, and therefore remains broad, thus failing as an effective tool to guide the plan of action strategically (WHO 2004). In practice, the plan of action often clusters programmes (for example, the 2002-2003 "tobacco control" and "mental health" programmes are now grouped into "mental health and substance abuse") rather than closing them down (Santamaria 2006) under the pressure of the MOH. The need to concentrate support in fewer programmes to get more results is being contested and it is being argued that indeed less focus (in international aid organizations) could promote more effective aid (Munro 2005).

Other criticisms on WHO work in countries relate to the tension that some authors see within the recruitment procedures to respond to global normative work (national experience or in field research needed) versus work at country level (younger cohorts), or the heavy dependence on extrabudgetary resources from a few bilateral countries that provides them with much political and decision-making influence on the WHO agenda (Murray 2005).

Other (country) factors that affect the absorption of international support for health, and that could therefore affect WHO work in countries, include insufficient attention to project process, lack of national commitment, absorption capacity, coordination, or failure to provide counterpart funds (Sabbat 1997). The latter concur with WHO country evaluations, which found better programmatic quality in programmes for which national coordination mechanism and sufficient funding exist (WHO 2004; WHO 2005).

2.2 On epidemic alert and response

EPR importance and WHO role

Developing systems of communicable diseases surveillance and response to epidemics has many elements of global public goods (eradication of smallpox, IHR, dealing with SARS), and some of transnational (eradication of guinea worm) or local (national Integrated Disease Surveillance and Response System) public goods (Smith, Woodward et al. 2004). Despite the importance that they have for the global community, no international institution[12] can supply global/transnational public goods directly. It is only at country level that the application in the provision of these public goods can be enforced (Barrett 2005). However, the application of global public health surveillance could burden developing countries which could perceive these supra-national initiatives as responding exclusively to the interests of external partners (Calain 2007).

Some authors recognize the advantage of WHO in relation to EPR in countries, as well as its ability to develop standardized guidelines for specific diseases (globally) and the role that it can play in the provision of public goods (Smith, Woodward et al. 2004; Smith 2006; McDougall, Upshur et al. 2008). However, they doubt that WHO will be able to meet the growing demands from countries for two reasons. The first is that WHO budgetary structure depends heavily on extrabudgetary funding. This structure has a questionable sustainability and skews assistance towards specific diseases (such as polio, HIV/AIDS), rather than country health systems. The second reason is that the resources available to countries do not suffice to complete the necessary work (Lele, Ridker et al. 2005).

Surveillance is useful at national level through providing advance notice to governments to prepare for, or to respond to, an outbreak. Thus, while responding to an outbreak usually does not have global spill over, the information gained from surveillance can provide global benefits. However, countries have an incentive to free ride on the surveillance of their neighbours, and may be reluctant to share information about disease activity because of domestic concerns about adverse publicity and implications for their economic activity. WHO is well placed to

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[12] The research uses the term institution as North described it, to illustrate the structures and mechanisms of social order and cooperation governing the behavior of a set of individuals (North, 1990).

organize and facilitate surveillance efforts in countries adding to the importance of EPR programmes (Smith, Woodward et al. 2004; Barrett 2005; Aldis 2008). However, it remains to be seen whether development partners will support the strengthening of health systems in poor countries needed for EPR to become sustainable (Aldis 2008).

Development of systems versus specific disease control

With the recent emphasis on global health interventions, there has been a shift away from general (surveillance and response) systems towards the prevention and treatment of some specific communicable diseases (Tobar, Gurtler et al. 2006). In countries, the shift has positively increased political awareness of specific diseases, augmented financial resources and aid coordination strategies around these diseases, and supported disease-specific planning, implementation, monitoring and evaluation. At the same time, the shift towards specific diseases has fragmented health services and distorted the allocation of scarce human and financial resources. Moreover, the efforts to develop single-purpose staff into multi-purpose staff have been insufficient, and the national capacity built to sustain the achievements of disease-specific approaches is weak (Lele, Ridker et al. 2005; Murray 2005; Blas 2006). During informal discussions with senior WHO staff, they argued that EPR would need to move as a vertical program faster than the overall health system, if countries are to protect the communities against events such as SARS or Ebola outbreaks. They mentioned the Expanded Programme on Immunization as an example of a *vertical programme* that most countries sustain successfully at present.

The above illustrates the conflict of interest between international initiatives that typically involve vertical programmes, versus public health interests that are often better supplied through horizontal systems. Thus, there is a need to review the balance of the vertical and horizontal dimensions of development assistance to health programmes (Smith, Woodward et al. 2004; Barrett 2005), with upgraded facilities for training of health staff, better logistics of EPR, and evaluation of disease-specific and health system-wide policies and strategies (Lele, Ridker et al. 2005).

2.3 On assessing performance and development assistance

The logical framework antecedents are in theories on "management by objectives", initially adopted by the private sector, and designed for production agencies, that have relatively stable histories amenable to a planning process, culture of data production, and manageable level of conflict between the stakeholders (Radin 1998; Gasper 2000). The use of logframes in public organizations has its roots in the US military planning and USAID started using them in 1971. The use of logframes expanded quickly, and by the 1990s, most of the donor agencies followed this practice (Dearden and Kowalski 2003).

The experience cumulated indicated that results-based management and logframes are likely to face problems when implemented across organizations that do not implement programmes directly, but rather operate through others by providing funds, or by supporting the application of norms and standards (Radin 1998).

Binnendijk (2000) identified the key phases that characterize results-based management in development cooperation agencies and grouped them into strategic planning, performance measurement, and results-based management. These phases take place at three organizational levels, namely project/programme, country, and corporate or agency wide. These phases are related and inclusive, and need to advance hand in hand with other broader institutional reform components to achieve results (Figure 3, page35). Most of the agencies that Binnendijk evaluated had considerable experience in results-based management at project level, limited at country level, and only incipient at organization-wide level (Binnendijk 2000).

The obstacles found to measuring outcomes often rendered the notion of effectiveness elusive and contributed to narrowing the performance management to financial and other efficiency-based measures (Modell 2004). These obstacles also lead to developing different options, such as the Results-Oriented Management (Wholey 2003), and Balanced Scorecard (Kaplan and Norton 2005). Both models were applied initially in the private sector, but are increasingly being used in public organizations. The Balanced Scorecard aims at alleviating the tensions of operating several performance measurements (financial, outcome) by *imposing* a more goal-directed, multidimensional measurements through consensus among stakeholders. Increasingly public organizations are using these multidimensional performance measurement models in

addition to the more traditional models, without a solid evidence of their suitability in public organizations (Modell 2004).

Figure 3. Key phases and components of results-based management
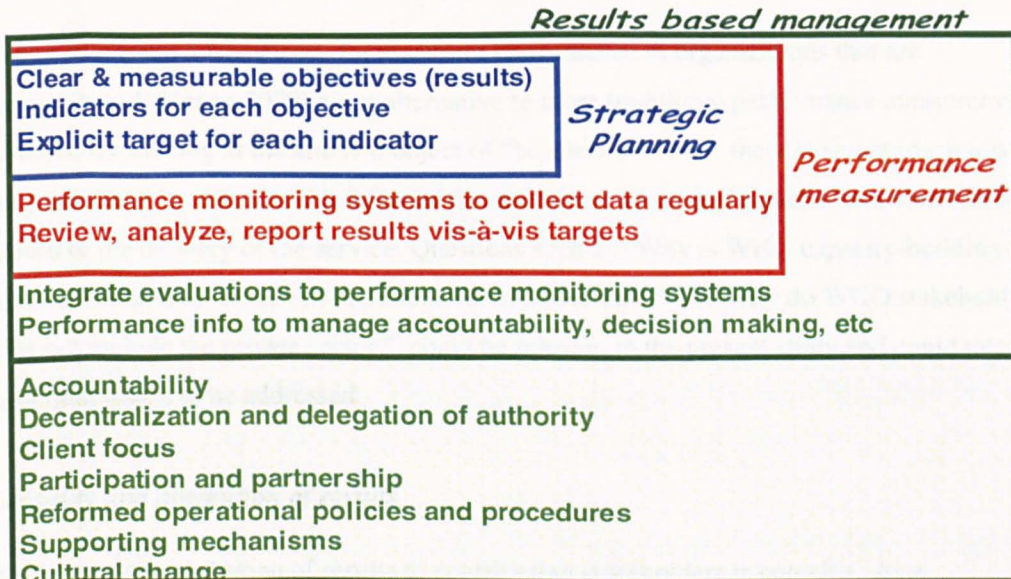
Adapted from A. Binnendijk, 2000

Result chains linking inputs, outputs, outcomes and impacts tend to be non-linear and complex. In their review, Lele and others comment that the results chains are not always well articulated, and often the baselines and evidence gathered are insufficient at the design phase of the programme (e.g. The Global Fund to Fight Aids, Tuberculosis and Malaria; and Roll Back Malaria). For funding mechanisms, outcomes and impact are easier to measure, causality is easier to establish, and outcomes are easier to attribute to specific activities, than for advocacy programmes, because financing mechanisms tend to promote concrete activities. The ultimate health impacts on beneficiaries are assessed with confidence only in the programmes backed up by the UNDP-World Bank-WHO Special Programme for Research and Training in Tropical Diseases, Global Alliance for Vaccines and Immunization, or Stop TB Partnership. Programmes with stronger monitoring and evaluation systems uncover stronger evidence of positive process outcomes (UNAIDS; The Global Fund to Fight Aids, Tuberculosis and Malaria) than others that are newer or have weaker systems (Roll Back Malaria) (Lele, Ridker et al. 2005).

In addition to the above difficulties, there are hazards linked to measuring organizational performance that are relevant to the present research (Smith and Goddard 2002). In particular, the systems that WHO uses routinely to measure its performance in countries could be associated with "tunnel vision", "sub-optimization", "myopia", or "misinterpretation"[13].

Kueng suggested a framework for assessing performance in organizations that are process-based (Kueng 2000) as an alternative to more traditional performance measurement systems. By looking at the aim and object of "business process", there is an approach towards the "consumer" needs. Consideration of the contextual issues and stakeholders views become central to the delivery of the service. Questions such as "Why is WHO capacity-building in communicable disease surveillance centred on MOH staff?" or "Why do WHO stakeholders in EPR not include the private sector?" could be relevant in the present study and could uncover important issues to be addressed.

Causality and attribution of results

In practice, the attribution of results to contributing stakeholders is complex. As a representative from a bilateral organization working on health policy in Lebanon put it,

> "... *our interventions seem to achieve no results in the time we expect. Suddenly things happen and we see a link to our earlier input. However, we see links to earlier inputs of other partners as well, since we all try similar initiatives at one point or other...*"
> (Santamaria 2006)

A literature review on the follow-up to the Paris Declaration on Aid Effectiveness (Evans and Booth 2006) referred to an analysis by the World Bank of its Annual Reviews of Development Effectiveness (1997-2005). The World Bank discusses two important aspects related to the association and causality of (agency) contribution and (country) results. The first aspect is that the total impact of donor efforts at country level may be more than, or less than, the sum of its parts. Therefore, there is a need to understand the interaction between country conditions and the factors that influence the translation of "aid" into "development". The second aspect is that demonstrating attribution of results in relation to an agency effort is difficult and that, therefore, alternative approaches could be useful, such as moving towards a "most likely association"

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[13] By focusing on a set of activities at the expense of other ways of achieving outcomes; pursuing narrow targets at the expense of the whole system's objective; focusing on the short-term at the expense of long-term considerations that manifest only in several years time; or inferring about performance without allowing the full range of potential influences.

based on the *best* evidence available. The most likely association acknowledges the contextual conditions in relation to the collaboration being analysed and the limitation of the data gathered.

One way to deal with attribution issues is through joint evaluations whereby the stakeholders agree on such a mechanism. While the theoretical approach has advanced considerably (OECD 2005), in practice, there have been few examples[14] reported to date (Evans and Booth 2006).

Summary

The issues from the literature that are relevant to the research include those related to the WHO work at country level, and in particular, the influence that the Country Cooperation Strategy has in the plan of action, or the influence of extrabudgetary resources in the priority setting and the plan of action. Issues related to the absorption capacity in countries and the mechanisms and functions through which WHO delivers its assistance are relevant as well.

Issues that are relevant to the support to EPR in countries include the differences in perception of the importance of global initiatives and the influence that they have in the setting of national EPR agenda, and the balance between EPR systemic and specific disease control approaches. Exploring the meaning of "results" for the different stakeholders is relevant as well, because it can help explain attitudes towards EPR and guide WHO work.

Finally, the research will explore how and to what extent the use of tools to assess the programmatic performance is facilitating the management by results. In particular, it will analyse how these tools and systems work in practice, if the systems measuring WHO performance in EPR in the countries studied are associated with any hazard inherent to the systems, and how these could be addressed. The way in which contribution and attribution issues are dealt with is relevant as well, because it could orient future ways of assessing performance approaches in WHO.

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[14] Such as the United Nations joint country evaluation in South Africa 2008; International Health Partnership, launched in 2007.

3 Research framework and methods

This chapter presents the methodology used for the research. It is divided into sections that deal with the approach, the aims and objectives, boundaries, and planned outcomes. The chapter then describes the research methods, and how the data were collected, generated, and analyzed. Finally, the chapter addresses the quality of the research, its limitations, and the ethical considerations that guided it.

3.1 Research approach

The research explores the use of logframes to assess WHO programmatic performance in EPR at country level, in the context of an increased focus on results based management. It assumes that the knowledge about WHO results in EPR in countries is partial, because the routine systems and tools to assess performance do not consider the perspectives on what "results" mean or which contextual factors affect them. In particular, "results" will mean different things to different agencies. Moreover, perceptions will vary between those administering WHO resources entrusted to the country office (country team), and other levels of WHO (regions, headquarters) providing services through the country office.

What constitutes "results" ensues from how the stakeholders in the country (WHO team, staff at the MOH, and other partners) define them as well. In this sense, the primary interest of the study is not to judge what this reality "is" as a single measurement of achievement, but rather to approach "results" through the representation of this term to the different actors concerned.

The theoretical concept underpinning the research, therefore, takes a "systems" perspective to examine the interplay between contexts and processes. Hence, the research is linked to theory-based evaluations. These utilize "action theories" to model causal factors that explain how organizations and individuals can be influenced by, and respond to, processes *within the context* of their operation (Chen, 1990; Pawson and Tilley, 1997). The research takes a realistic stand because it assumes that knowledge depends upon the context and the moment in which meaning is created and none can be neutral or disinterested. Therefore the research attempts to analyse "what exists" (Bates and Jenkins 2007) by capturing "the image of the social reality"(Grix 2002; Bryman and Bell 2003).

This "realistic" perspective is appropriate, because systems and tools that assess performance and results in organizations matter since they affect the management of such organizations. Organizations are not only dependent on differences in what "results" mean to the stakeholders (Explanandum), but also on the application of the systems used to measure them (Explanans)[15]. The actors and the contexts within the systems (realism) influence the existing constitutive systems of these organizations.

In following this theoretical perspective, the research emphasizes the importance of both agents and systems (Grix 2002), and accepts that there is not only one "right explanation of results". In particular, the approach will help address the core questions related to understanding of the *meaning* of "results" (Green and Browne 2005). Thus, this research assumes that other perspectives on what constitutes "results" are worth studying to understand how systems and tools can contribute to organizational improvement. The variation in perspectives is acknowledged and with it, the possibility that there may be bias in interpreting them. The methodology of the study provides for measures to minimize the effect of potential bias (see page 57). It also stresses the importance of discussing these different perspectives in a transparent way, to reconcile the various positions. Finally, the research concentrates only on the systems and tools that are used to measure performance at country level, in a context of organizational management lead by results (Annex 4 in page 188). In this sense, the focus of the research is not a policy analysis, but rather an organizational research study (Patton 2002). It examines relationships between elements of organizational work, and provides an inside standpoint for anticipating possible unintended consequences of new policies and procedures (Silverman 2004) (Figure 4, page 43).

3.1.1 Theory-based evaluation framework

Theory-based evaluation, also referred to as programme-theory model, sets out the theoretical assumptions underlying an intervention and tracks the anticipated sequence of linkages from input and activities to outcomes. As such, it constitutes a programme theory useful to test the process under review. Programme theory model may be seen as an extended results model, because "it opens the box of the programme theory, uncovers mechanisms, and raises focus to interventions or organizational field" (Hansen 2005). The notion of defining programme theory has not been a component of evaluation. However, increasingly when addressing effectiveness

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[15] *Explanandum* relates to the sentence describing the phenomenon to be explained (not that phenomenon itself). *Explanans* relates to those sentences which are adduced to account for the phenomenon.

of programmes or policies and ways to improve them, it helps understanding and investigating the programme explicit or implicit theory (Weiss 1998).

The programme theory does not require uniform acceptance and is better understood as a set of beliefs that underlie action. This is especially so in complex phenomena that are not laid out in clear-cut statements of why certain (programme) activities have been selected and which actions will lead to which desired ends (Carvalho and White 2004). There can be multiple theories present in the linking of inputs to outcomes of the process being analysed. In this sense, programme theory refers to the mechanisms that mediate the delivery of the programme and the emergence of the outcomes of interest. The operative mechanism of change is not the programme activities, but the response that the activities generate. Therefore, the emphasis of programme theory is the response of individuals to the programme activities.

Together with the programme theory, there is the so-called "implementation theory". This implementation theory deals exclusively with the delivery of programme activities and implies that if the implementation of activities goes as planned, with sufficient quality, intensity, and fidelity to plan, these activities will attain the desired results. The combination of programme theory and implementation theory intertwines in the evolution of a programme and constitutes the programme theory of change (Weiss 1998).

Using programme theories in evaluative work provides early indications of the programme effectiveness, as it allows the collection of information at intermediate stages between the initiation of the programme and its outcomes. By following the sequence of stages, it helps explaining how and why effects occurred. Where different theoretical assumptions are being tracked, having a programme theory can confirm which of these assumptions had the better empirical support (Chen 1994). Evaluative work that is theory-based ensures that the results identified connect firmly to what the programmes have been carrying out, and that the results are due to programme activities (Chen and Rossi 1989). Theory-based evaluation could as well help increase the generalizability of study results from single case to the range of programmes that are based on similar assumptions (Weiss 1998).

There are several ways to analyse the viability of programme theory. The present research is "explanatory", because it compares the expectations generated by the programme theory, with the empirical data collected from the two countries studied, to see how well programme theory

and data from these two countries fit (Marshall and Rossman 1999). The research is a process-improvement evaluation, because it "provides information on the relative strengths/weaknesses in implementation processes for the purpose of improving the program (instrumental use), or for enlightening decision making in general (conceptual use)" (Chen 1996).

3.1.2 Programme theory of managing by results in EPR at country level

The programme theory of managing by results in EPR at country level focuses on the organizational effectiveness that describes what system needs to be in place to produce these results. For example, the justification for a negotiation of the EPR plan with staff at the MOH and with partners is that one of the WHO core functions at country level is partnership development, including advocacy and leadership. The approach draws on the logical framework from which the results-based management approach adopted by WHO derives. This approach argues that an effective organization is one that incorporates a results focus into all its processes and uses the results to improve its performance continually.

The framework used in this research was built as a systems model and constructed using four managerial functions and three layers[16], using general management principles. The model was then adapted to the EPR programme. Later on, the model was validated through brainstorming sessions with staff working in the WHO headquarters department in charge of Evaluation and Performance Audits. Finally, the model was completed with the experience from four previous country evaluations that WHO carried out from 2004 to 2006 that analysed in depth the EPR programme (WHO 2004; WHO 2005) to identify the specific assumptions and what would constitute the "anti-theory" (Figure 4, page 43). The anti-theory comprises elements deviating from the assumptions observed during the above-mentioned WHO country evaluations.

The differences between the assumptions and the anti-theory reflect the existing tension between the academic model of organizational decision-making and the client model of organizational decision-making (Hennessy and Sullivan 1989), and the results of some evaluations on multilateral organizational effectiveness (Selbervik and Jerve 2004; Scott 2005; Burall 2007). In particular, the anti-theory includes asymmetric planning, contexts that are not conducive to (EPR) implementation, performance systems non-sensitive to critical processes, or ill-defined analysis of the contribution from all partners (Figure 4, page 43).

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[16] Plan, organise, implement, and report/monitor; and inputs, processes, and outputs/results

The methodology used some of the principles of conceptualization for planning and evaluation (Trochim and Linton 1986). In addition, two papers on theory-based evaluations (Chen 1994; Carvalho and White 2004) have been used in the identification of the theory. The theory is aligned to the one behind the process performance measurement system (Kueng 2000).

3.2 Aims and objectives

The research aims to study the systems and tools that WHO uses to assess its contribution to national EPR programmes at country level. Improvements to these systems and tools may help WHO to become more effective in contributing to EPR programmes. In addition, better understanding of these systems and tools will contribute to the debate on the appropriateness of the methods and approach for measuring organizational performance.

This research explores the use of logframes to assess the programmatic performance in a multilateral organization at country level, in the context of an increased focus on results based management. Its specific objectives are:

> assess the comparative advantages and challenges of various assessment tools and systems that WHO uses to measure its performance in EPR at country level;

> address the WHO contribution in terms of results and impact in the area studied; and

> propose options for addressing WHO accountability performance and cooperation effectiveness in EPR at country level.

To achieve these objectives, the study established a list of core research questions covering a wide range of issues[17]. This was so because the standpoint of the research is that there are different interpretations and approaches to the meaning of "results". This is because "results" are influenced by the systems and tools used to assess them; and because these systems and tools have a bearing on how organizations can be managed more effectively.

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[17] Including: 1) Are the routine systems of WHO appropriate to assess its contribution to EPR within the Organization results-based management framework?; 2) What were the major changes with respect to EPR in the two countries studied?; 3) What was WHO contribution in the area of EPR since January 2004 in these two countries, and how was it reported?; 4) What constitutes "results" in EPR to WHO and the main stakeholders in health?; 5) Which "results" in EPR in these two countries could be attributable to WHO?; 6) How does WHO estimate these changes and its contribution to the changes (attribution)? and 7) What are the common EPR issues in these two countries and how do they conform to evidence from other sources?

Figure 4. Framework of WHO country support to epidemic preparedness and response (EPR) and results-based management framework

	PLAN	ORGANISE	IMPLEMENT	REPORT/MONITOR
Inputs	Country situation; WHO Policy drivers; National EPR plan	Partners; Emergent need	Activities: MOH and/or Partners; WHO ad hoc support (Regional Office, country, Headquarters)	MOH and/or Partners reporting; Ad hoc / routine monitoring: RegOffice &/or Headquarters reporting
Processes	WHO 3-level team identifies Country Cooperation Strategy w/MOH / partners; WHO Country team negotiates Plan of action on EPR w/ MOH & partners; WHO Regional Office approves Plan of action on EPR (with MOH)	Country EPR focal point initiates action w/ MOH focal point; MOH officially requests support for EPR's specific activities within the EPR plan of action; Country team processes request	WHO funds and WHO country staff implement; WHO funds and MOH / partners implement; "No funds", WHO supports implementation; Results	Ad hoc plan of action WHO country reporting; EPR Plan of action implementation routine monitoring
Outputs/results	WHO Country Plan of Action (Approved)	Request to Regional Office/Headquarters for Technical Assistance.		MidTerm & End of Biennium reports for Plan of Action

Assumptions

PLAN	ORGANISE	IMPLEMENT / REPORT/MONITOR
Public Health needs in EPR are properly identified	WHO EPR plan of action is agreed and resources made available timely	National EPR plan of action is implemented fully and timely
WHO Country Plan of Action is aligned to the corporate priorities	Country conditions for implementation are present	Contributions from partners (inc. WHO) are maximised
Coordination with partners is effective	Operational partner is available and capable	Population is protected from epidemics
		Country systems and tools assess EPR performance accurately and precisely
		WHO systems and tools assess its performance accurately and precisely

Anti-theory

PLAN	ORGANISE	IMPLEMENT / REPORT/MONITOR
Asymmetric planning process	Funds available for EPR plan are insufficient or tied for other purposes	Performance systems and tools do not capture critical processes
No proper consultation with MOH at appropriate levels	Availability of operational partners is ineffective	Utilization of systems and tools is not adequate
Insufficient inclusiveness of partners	Minimal local resources are not available	Contribution from partners is ill defined
	Priorities have shifted	
	Country conditions not conducive to EPR project implementation	EPR national results and partners' projects results are mixed
		WHO experience in EPR do not influence future plans

3.3 Boundaries

3.3.1 Time

The research was focused between January 2004 to July 2007, to include a full plan of action and its assessment (January 2004 to December 2005), up to the timing of the research.

3.3.2 Countries

The research focused on Myanmar and Nepal for the following reasons:

(a) The WHO Regional Office for South-East Asia showed interest in operational research as a means of improving the effectiveness of its country offices.

(b) Elimination of possible sources of bias: The countries should belong to the same WHO Region to control for potential differences in management between regional offices.

(c) Choosing countries that could illustrate differences with regard to the research concerns: The research considered that having fewer external stakeholders facilitates the analysis between their input and outcomes, and that adding stakeholders complicates the analysis. Therefore, it considered one country among those with fewer external stakeholders (Democratic People's Republic of Korea, Bhutan or Myanmar) and one among those with many external partners (Bangladesh, Indonesia or Nepal) (See **Table 3**, page 44).

(d) Feasibility: The final selection process included consulting the WHO Regional Office for South-East Asia on the feasibility of carrying out the field study in 2007, and obtaining the necessary clearances at country level.

Table 3. Selected information, countries of the WHO South-East Asia Region

Country	Pop '04 (million)	OECD '02-'04	Total hlth $m sector external assist (year)*	WHO 02-03 expenditures ($)	EPR 02-03 expenditures	%EPR to total 02-03	% EB to total expenditures	WHO 04-05 expenditures ($)	EPR 04-05 expenditures	%EPR to total 04-05	% EB to total expenditures
Bangladesh	140.0	94.0	168 ('97)	16,752,230	131,571	0.8%	42.4%	24,869,846	214,072	0.9	56.7%
Bhutan	2.1	9.0	16 ('00)	2,286,286	2,241	0.1%	7.2%	2,549,725	-	-	6.2%
DPRK	22.4		??	7,228,593	91,376	1.3%	59.5%	11,933,899	137,827	1.2	72.1%
Timor Leste	0.9	14.0	??	2,603,345	731,829	28.1%	55.7%	2,214,491	225,206	10.2	25.1%
India	1,087.1	370.0	540,144 ('00)	55,950,848	1,679,279	3.0%	76.6%	94,060,503	1,488,100	1.6	85.7%
Indonesia	220.1	160.0	??	22,173,816	74,382	0.3%	57.8%	38,491,569	1,913,976	5.0	74.1%
Maldives	0.3		21 ('00)	2,042,342	119,889	5.9%	0.0%	6,365,816	-	-	67.7%
Myanmar	50.0	26.0	17 ('96)	10,818,500	124,364	1.1%	37.4%	12,663,415	90,153	0.7	44.3%
Nepal	26.6	81.0	??	15,991,283	576,202	3.6%	54.2%	17,955,321	453,475	2.5	54.0%
SriLanka	20.6	40.0	116 ('99)	6,516,481	63,891	1.0%	25.9%	14,307,820	77,773	0.5	67.0%
Thailand	63.7	40.0	??	6,285,387	1,077,789	17.1%	13.5%	5,871,870	549,641	9.4	8.0%

*= as per information provided in the corresponding last CCS
Source: Country Cooperation Strategies (CCS) and WHO/ACT04.01 and WHO/ACT06.01 (for expenditure figures)

Table 4 below provides details about the profile of the research. These include the approach adopted, the methodology used, the boundaries, and information on what guided its operationalization.

Table 4. Research profile

Social phenomena / reality	Institutions, organizations, systems.
Ontological position	Realist approach to organizations and systems that govern them.
Epistemology	There are various perspectives on what constitutes "results" and on the way to assess them.
Organizational theory	Neo-modernist (ontology = realist).
Design	Case study: Embedded (multiple units of analysis: tool performance, results, attribution), Multiple (two-cases design [two countries]).
Methodology	Qualitative.
Methods	Semi-structured interviews (key informant interviews). Direct observation and participant observation. Documentary analysis.
Sources	Interview notes and transcripts, document data.
Concept	Organizational performance assessment.
Variables	Results, attribution .
Indicators	Performance of tools about what constitutes "results".
Operationalization	*"Performance of tools and systems"* Documentary analysis on the quality attributes of tools and routine systems (reports, evaluations). *"Results"*: (i) Documentary analysis on the performance of currently used tools. (ii) Key informant interviews on what constitutes "results" and on the adequacy of tools used to measure performance. (iii) Key informant interviews on results in national EPR. *"Attribution"*: (iv) Documentary analysis on results reported by WHO. (v) Key informant interviews on the contribution of WHO to programme progress.
Boundaries	*Time:* January 2004 to June 2007. *WHO Region:* South East Asia *Countries:* Myanmar and Nepal. *Programmatic:* Epidemic Preparedness and Response.

3.3.3 Areas of focus

Integrated disease surveillance, and epidemic alert and response are two components of national programmes on EPR that WHO supports. These components present convenient limits for the research, since they propose a standardized series of activities that offer an opportunity for comparison. These include the identification of a list of priority diseases, decentralization of

surveillance to the periphery, use of specific guidelines, development of laboratory network, and reporting and feedback (in the case of integrated disease surveillance); or the establishment of task force, constitution of contingency stock, training and deployment of rapid epidemic response teams, epidemic management, and phasing out (for outbreak alert and response).

There are other components to national programmes on EPR. In particular, country programmes include a national human influenza pandemic preparedness plan, or the implementation of the IHR (2005). However, these involve multiple partners and sectors that go beyond the scope of this study. There were, nevertheless, references to the wider EPR programme as needed.

3.4 Planned outcomes

The research aimed at producing:

- a critique of the various accountability systems that WHO uses at country level in the context of results-based management;

- an understanding of what "results" in EPR at country level means to the various stakeholders;

- a discussion of the issues that arise in relation to the attribution of results in EPR to WHO in the two countries studied;

- a discussion on the generalization of the results of the present research to other programmes, other countries, or/and to other users;

- a set of options that WHO could adopt when assessing the impact of its contribution to other settings (programmes, countries).

3.5 Research methods

The research used a realistic framework to account for the different perspectives in approaching WHO results measurement in EPR at country level; and to seek the views of the different stakeholders on the contribution of WHO to EPR national programmes. Therefore, the research uses a qualitative enquiry that is justified because:

(a) The epistemological paradigm chosen favours the importance of the various perspectives of approaching organizational results.

(b) The study will generate data through methods that are flexible and sensitive to the social context in which the data is produced; and the methods of analysis involve understandings of complexity, detail and context (Mason 1996; Thomas 2000).

(c) The research focuses on processes in a "naturally occurring data", where the environment cannot be controlled, and it aims at understanding how these processes occur (Murphy, Dingwall et al. 1998; Thomas 2000; Bryman 2001).

3.5.1 Case studies

Case studies are posited to be the most appropriate tools to examine a contemporary phenomenon involving complex inter-relational issues (Patton 2002; Yin 2003; Yin 2003). Hence, case studies can be explanatory, exploratory, descriptive or a combination of the three (Mays and Pope 2000). As Keen and Packwood (1995) explain, case studies are perhaps most valuable where the researcher needs to address broad or complex questions, and where the detail of whether an intervention or process succeeds or fails depends on how the local contexts influence the outcome (Keen and Packwood 1995). Therefore, for this study, a case study methodology seemed highly appropriate.

An important feature of case study research is that each case is highly context-specific making both the validity and generalizability of any results problematic. A key factor in designing case studies is thus to ensure a greater reliability of findings through the triangulation of a range of data sources, as well as using clearly defined questions and thematic analysis between the case studies.

The research was designed around two country case studies. It examined the "how" and "why" of a contemporary (2004-2007) event (WHO performance assessment, "results") happening in an environment that the researcher does not control and that is affected by context (country A and B settings) (Yin 2003). Running as a theme between the two cases, were three embedded units of analysis: performance of tools used; "results"; and attribution (Figure 5, page 48).

Figure 5. Research design: Case study with two-cases and embedded three units of analysis
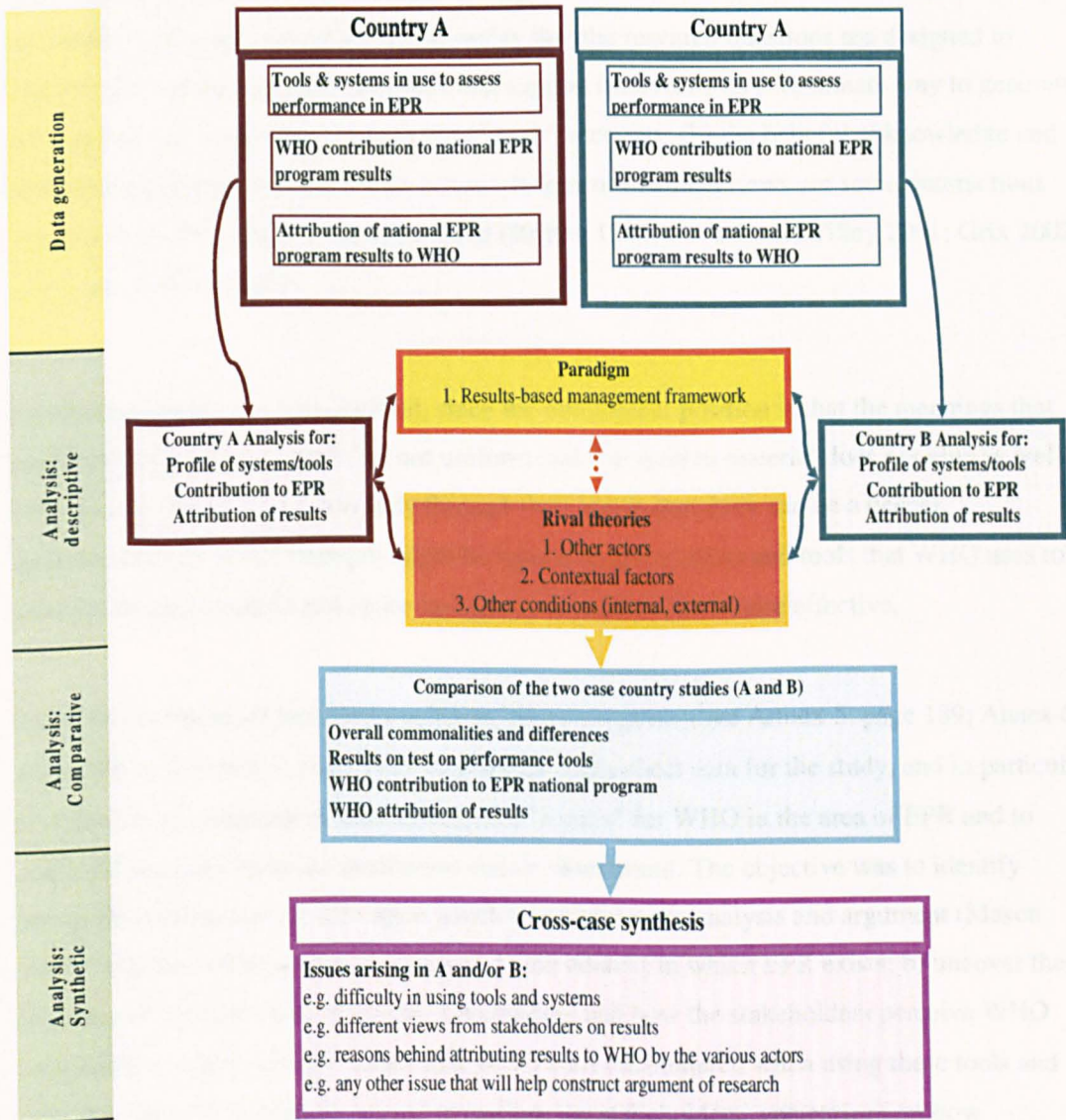
3.6 Data collection and generation strategies

The data generation process began in May 2007[18] and ended in January 2008. I was the only person collecting the data. The research planned for qualitative interviews as a principal source of data, complemented with documentary analysis and focus group discussions. However, not all planned activities took place. This section describes what happened.

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[18] After the Review Session, that took place on 3 May 2007 (See Annex 12).

3.6.1 Qualitative interviews

The ontological position of this research suggests that individuals' views and understandings are meaningful properties of the social reality that the research questions are designed to explore. The epistemological positions that suggest interviews as a legitimate way to generate data include (a) the need to listen to individuals' accounts; (b) the belief that knowledge and evidence are contextual; and (c) the acknowledgment that interviews are social interactions whose complexities need to be understood (Britten 1995; Pawson and Tilley 2001; Grix 2002; Bates and Jenkins 2007).

Conducting interviews was justified, since the ontological position is that the meanings that stakeholders attach to "results" is not uniform and that written material does not always well reflect these results. Thus, it is only through their views that there can be a deeper understanding of which changes might be needed in the systems and tools that WHO uses to measure its performance and make operations at country level more effective.

I used semi-structured interviews using an interview guide (See Annex 5, page 189; Annex 6, page 190; and Annex 7, page 192) to generate and collect data for the study, and in particular, to approach the meaning of what constitutes "results" for WHO in the area of EPR and to contextualize approaches to attribution and its assessment. The objective was to identify interpretive themes in the data upon which to construct the analysis and argument (Mason 1996). The interviews served to a) illustrate the context in which EPR exists; b) uncover the meaning of "results" in EPR for the stakeholders and how the stakeholders perceive WHO contribution; and c) identify issues that WHO staff encountered when using these tools and systems. Also the interviews served to explore the stakeholders' perceptions on how cooperation effectiveness in the area of EPR works and their suggestions to improve systems. Key informants included the MOH, the WHO Country Team, and other stakeholders in EPR at country level.

The country interviews took place in Myanmar in July 2007 and in Nepal in September-October 2007. There were 26 interviews in each country. However, in some cases, these interviews involved more than one participant, because the interviewee invited one or several other colleagues to take part in the interview. Among the reasons for inviting one or more additional participants to the interview was the fact that the main interviewee had joined the

post recently, or wished to provide a more complete picture through group intervention. This resulted in 32 people participating in the interviews in Myanmar and 29 in Nepal. The participants belonged to national (MOH, NGOs) or international (WHO, NGOs, other United Nations agencies, and bilateral agencies) stakeholders (Table 5):

Table 5. Number of interviews by stakeholder, Nepal and Myanmar, 2007

	National			International				
	MOH		NGOs	WHO		NGOs	Other[b]	TOTAL
	CSR/ EPR	M&E/ PLN[a]		CSR/ EPR	M&E/ PLN[a]			
NEPAL*	8	2	1	4	4	2	5	26
MYANMAR **	3	3	4	7	3	3	3	26
TOTAL	11	5	5	11	7	5	8	52

[a] = Monitoring and Evaluation and/or planning
[b] = United Nations organizations, bilateral agencies
* = Nepal: 29 people participated in the 26 interviews
**= Myanmar: 32 people participated in the 26 interviews

All interviews were conducted in English. All interviewees had a good English command. I used a list of questions to guide the semi-structured interviews, selecting the set of questions that were applicable to the group of stakeholders to which the participant belonged (See Annex 6, page 190, and Annex 7, page 192). I recorded all interviews after obtaining the interviewee's informed consent (See Annex 10, page 199). I used audio-taping and took notes during the interviews, for back-up purposes, and also to have a record of impressions about the context to assist me later on in analysing the data.

I transcribed all the verbatim of the interviews personally. I did so because some interviewees in Myanmar and in Nepal agreed to the interview and accepted its recording under the condition that I do not outsource the transcription of the recorded interviews or share records that could potentially disclose them as the source of the data contained in the final report.

In addition, I conducted interviews of key informants at the WHO Regional Office for South-East Asia in May and June 2007 to finalise the protocol and prepare for the field visits. This included six staff working in the technical EPR unit and three working in the evaluation unit.

3.6.2 Documentary collection and analysis

The justification for using documentary evidence lies in the ontological position inherent in the research design that sees the ways of producing and consuming documents in themselves as meaningful constituents of the social world. In addition, the epistemological position suggests that written records can provide evidence of the ontological properties in both literal and interpretive senses. The assumptions that systems and tools are critical components of organizations, that they illustrate how these organizations function, and that they can influence organizational performance, justified using this method to generate data. The fact that these resources are already available, that they are in the public domain, and that they could be easily accessed, supported the reason for using them (Mason 1996; Green and Browne 2005).

Documentary resources contributed as data for some parts of the research. For example, documents were analysed for appropriateness of the tools used to assess WHO results in EPR at country level.

Documentary material on WHO EPR was collected at global and regional levels. This included documents available in the public domain, either electronically (www.who.int) or published[19]. Specific documents on countries included those from WHO (Country Cooperation Strategy, plan of action for 2004-2005 and for 2006-2007, mid-term reports of 2004 and 2006, technical missions, annual reports), from the MOH (National Health Plan, EPR national strategy), and from other stakeholders, including external evaluations.

3.6.3 Focus groups

The research had planned focus group discussions as a supplementary research technique to the other methods used, but their use was not to be considered as a self-contained means of data collection or primary research technique (Brewerton and Millward 2001). The objectives of these planned focus group discussions were threefold:

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[19] For example, material on the application of the IHR (2005), Asian Pacific Strategy on Emerging Diseases, outbreaks of infectious diseases notified to WHO or reported in national surveillance systems, planning (10th and 11th General Programme of Work) or monitoring/reporting (reports to Regional Committees and to the World Health Assembly).

(a)   Analyse the critical events (timeline) related to EPR and to the national and WHO programme.

(b)   Explore the strengths, weaknesses, opportunities and threats (SWOT) of the WHO programme.

(c)   Analyse the experiences in using tools to address WHO performance.

These focus group discussions could not be organized due to logistic reasons and therefore, alternative solutions were sought. The timeline was elaborated with information from documents and information gathered during the first interviews (Myanmar) or during the review workshop of the biennial plan of action (Nepal). Afterwards, subsequent interviewees were presented with the critical event analysis and were invited to complete and validate it. The analysis of the strengths, weaknesses, opportunities and threats; and of the experiences in using the tools was addressed by interviewing all planned participants to the focus group individually.

3.6.4 Observation

I attended several meetings that provided me with a direct observation and insight of the dynamics of WHO and its stakeholders through:

(a) Formal discussions between staff from WHO and from the MOH ("Myanmar Day" in WHO Regional Office for South-East Asia for the negotiation of the 2008-2009 WHO plan of action; and seminar on the contribution of 2006-2007 WHO plan of action to health development in Nepal).

(b) Working relationships between staff from WHO and from the MOH (periodical meetings on the International Health Partnership in Nepal), or among WHO staff (weekly Country Team meeting in Nepal).

(c) Delivery of technical support (assessment of the core competencies of the national disease surveillance system in Nepal).

In addition, I participated in the daily activities of the WHO Country Team in Nepal, including those more related to EPR (evaluation of the 2006-2007 EPR plan of action, presentation on facilitation techniques for public health journalists working on risk communication) (Table 6, page 56). By engaging *actively in the life* of the WHO Country Team in Nepal I understood

better the context in which WHO works and the issues that challenge its staff. This was a positive experience that allowed me to collect different types of data, and provided me with a better understanding of what was happening, helping my interpretations of the observation (Kawulich 2005).

3.6.5 Use of schematic representations

Schematic representations are useful for the description and interpretation of findings in case study research because they serve to deconstruct complex and multifaceted concepts and processes into their elements (Miles and Huberman 1994; Roche and Roche 1999; PARC 2004; Tattersall, Watt et al. 2007). However, the application of visual representation can be useful to illustrate the design and other underpinning processes in case research (Rosenberg and Yates 2007). During the process of this research, I developed several schematic representations and used them extensively throughout the research, including its design phase, during the field studies and for presentation of the research findings. These representations, used with mind maps (Buzan 1993), proved useful to refine the case study design, focus attention and validate information on specific processes and issues, and present the data clearly.

3.7 Data analysis

This part describes how the data collected supports the explanation of the study. The standpoint of the research is twofold:

> Firstly, it considers that there are systems and tools geared to assess "results" in an operational audit context. The extent to which these systems assess WHO performance depends on the ability of WHO staff to use them appropriately.

> Secondly, the research considers that there are other systems to assess performance (programmatic), and that these depend on what "results" mean to the system itself (outputs, outcomes, results) and to the various parties (contribution, attribution).

3.7.1 Framework analysis

"Framework" is an analytical process which involves a number of distinct though highly interconnected processes that follow a well-defined procedure, and therefore allow to

reconsider and re-work ideas ". Framework analysis is "a content analysis method which involves summarizing and classifying data within a thematic framework" (Ritchie and Spencer 1994), using a general inductive approach that provides a convenient and efficient way of analysing qualitative data (Thomas 2005). In the framework analysis, there is no deliberate attempt to "fracture" the data in order to open up new avenues for analysis - as is the case for grounded theory approaches (Green and Thorogood 2004). Also, the topic guide that serves to collect data in framework analysis is more structured from the outset than in other qualitative research (Pope and Mays 2000).

The research used the framework analysis approach with its distinct phases (Ritchie and Spencer 1994; Green and Browne 2005) to manage the data and to facilitate comparison between the two units of the research.

Familiarization with the data started during the transcription of the interviews and the reading of the research notes. I coded the transcribed text to disassemble and reassemble data according to several indexing categories that I had identified through the literature review (Annex 11, page 201). Then, I rearranged these fragments to explore the similarities and differences across the different interviews. While reading the transcriptions of the interviews, emerging themes appeared and thus, I incorporated them into a revised list of indexing categories. Ezzy's definition of coding reflected well the process that I felt as being "confusing with a mass of apparently unrelated material in particular in the early phases. As coding progressed themes emerged and the analysis basis became more organized and structured" (Ezzy 2002). At the end of this iterative process, I adapted the indexing list, containing the initial categories in addition to the new ones that had emerged (See Annex 11, page 201) from the interviews.

In the next phase I progressively constructed a framework with the chart of codes that (a) best fitted the data the Myanmar case study had generated; and (b) constituted a best-fit option to analyse the data and build an argument (Figure 6). The chart displays the themes that I considered most relevant for the research and for the discussion of the Myanmar data. In each theme I identified the categories that would explain most of the data[20]. Subsequently, I tried the chart for Nepal and adapted the differences in the core themes identified. Finally, I mapped and interpreted the data for some relevant issues in each country separately, and discussed how

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[20] Including the grouping for the contextual factors (situational, MOH, and broader politico-administrative), the meaning of results (health outcome, part of process/framework, means to achieve other things), or the value attached to WHO in case it were not in the country (little disruption, great loss and tough situation, disastrous situation, cannot imagine such situation).

these issues connected with one another. Therefore, the mapping illustrates the fit that could accommodate the maximum amount of data into a balanced number of sub-categories for the discussion of the case studies. In this sense, the importance of the embedded units of analysis that resulted from the interviews differed from the initial expectations. For example, the role of the contextual factors and the stakeholders' relations became more prominent than anticipated. Therefore, the analysis of the data from the countries (Chapters 4, 5, and 6) reflects the gap between what was planned in the research design (See Figure 5, page 48), and the data generated through the interviews in the two countries (See Figure 6)

Figure 6. Relationship among selected core themes
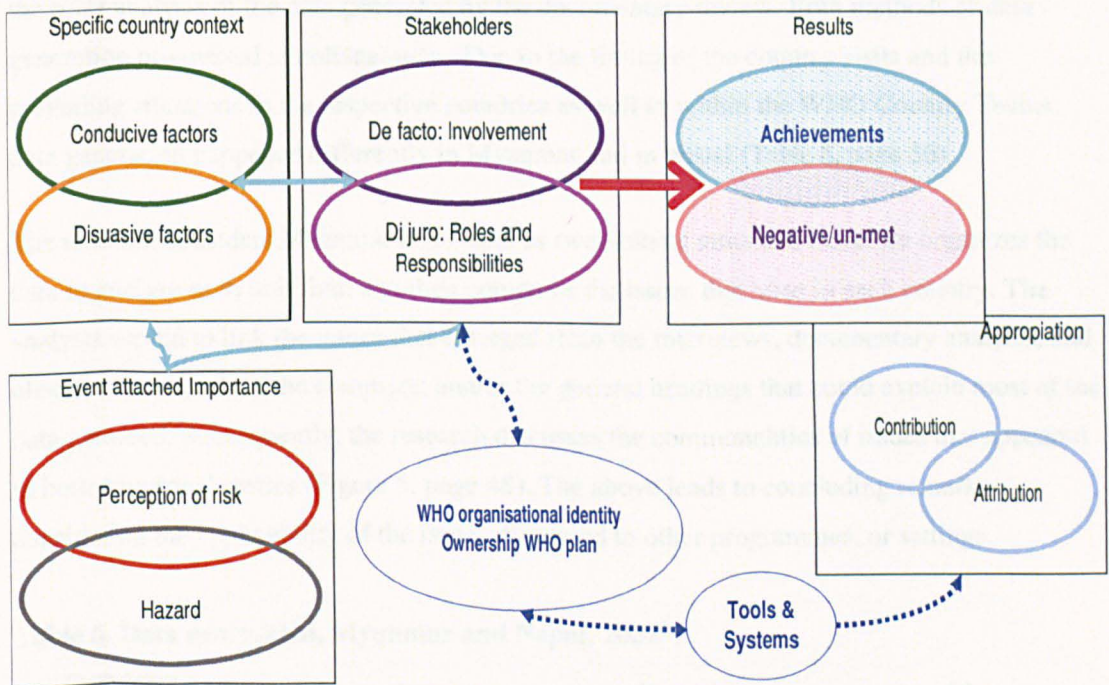
There is no universal endorsement of the use of computer software to assist qualitative data analysis. Some researchers consider computer software useful because they "give studies more credibility and status because of the association between computers and "hard" data and promote it, ...and speed up the process of retrieving and exploring data" (Richards and Richards 1991; Ezzy 2002). However, other researchers caution about the (over)expectations of computers in the analysis of qualitative data: "...a computer package may be a useful aid when gathering, organizing, and reorganizing data and helping to find exceptions, but no package is capable of perceiving a link between theory and data or defining an appropriate structure for the analysis" (Pope, Ziebland et al. 2000).

Initially, I proceeded manually and then used the NVivo software to facilitate the experimentation with codes. The use of NVivo (2008) computer-assisted package facilitated the organization and management of the interview materials and the building up of the framework for discussing results (Richards 1999; Bazeley and Richards 2000). The results are presented using mind maps (Buzan 1993) using the MindManager Pro7 computer-assisted package (MindJet 2004).

3.7.2 Research process

The effective generation of data from the interviews and observation was not contingent upon the prior analysis of the data generated by the documentary review. Both methods of data generation progressed simultaneously. Due to the timing of the country visits and the prevailing situations in the respective countries as well as within the WHO Country Teams, data generation happened differently in Myanmar and in Nepal (Table 6, page 56).

The research considers Myanmar and Nepal as two holistic units and therefore organizes the data to analyse each unit first, and then compares the issues that arise in each country. The analysis served to link the issues that emerged from the interviews, documentary analysis, and observation in each of the countries; and/or the general headings that could explain most of the data gathered. Subsequently, the research discusses the commonalities of issues that appeared in both countries' stories (Figure 5, page 48). The above leads to concluding remarks considering the applicability of the issues discussed to other programmes, or settings.

Table 6. Data generation, Myanmar and Nepal, 2007

	Documentary access	Focus group	Interview	Observation	Other
Myanmar	Publicly available material	Did not take place. Was replaced by additional key informant interviews	26 interviews with 32 participants (some involved more than 1 person at the initiative of interviewee)	Attended the visit of the WHO Regional Director to the Country Office	Attended the "Myanmar Day" in SEARO on the WHO/MOH negotiations for the 2008-2009 plan of work.
Nepal	Public material and selected internal WHO documents	Did not take place. Was replaced by additional key informant interviews and combined with direct observation of WHO/MOH negotiation of 2008-2009 Plan of Work	26 interviews with 30 participants.	Attended all Country team meetings during the period of the research. Attended periodical meetings with MOH on the International Health Partnership forum (Nepal pilot). Attended 1-day workshop on the presentation of results of the assessment of the national integrated disease surveillance system (operational research project). Attended 2-day seminar evaluation of the 2006-2007 plan of work with MOH.	Assisted with the evaluation of the EPR plan of work 2006-2007. Presented facilitation techniques at the workshop on "risk management communication during epidemics" for journalists (WHO/EPR activity). Was fully integrated in the life of the WHO Country Team

3.8 Quality of research

The research made efforts to link the constituent parts of the research logically (See Figure 7, page 58). In particular, it aimed at ensuring that the methods used supported the generation of the data needed in the analysis, and that the analysis fully used the data generated (Grix 2002).

3.8.1 Validity of data generation methods

The research used the qualitative interviews, documentary analysis, and observation. These generation methods were appropriate to the research design, a case study, and to its epistemological position (Section 3.6 on data collection and strategies, page 48) that call for multiple sources of evidence to ensure its construct validity (Easterby-Smith, Thorpe et al. 2006).

3.8.2 Validity of interpretation of data

Validity refers to the extent to which the account and the results of the research represent the phenomena to which they refer. Validity is an attribute of quality research that consists of several criteria (Miles and Huberman 1994; Patton 2002) contributing to the internal validity, and generalizability ensuring the external validity (Easterby-Smith, Thorpe et al. 2006):

a) **Conformability** expresses the correspondence of research findings to the reality investigated, and depends on the explanation of the processes and methods to allow replicability of results. To adhere to this criteria I made an explicit effort in the explanation of the methods used and the procedure for data analysis (earlier in Chapter 3). Figure 7, in page 58 illustrates the relation between the components of the research, including its procedures and specific objectives. Nevertheless, I recognise that repeating the research could produce different results, since the case studies reflect a reality influenced by a set of conditions that would be difficult to reproduce.

b) **Transparency.** Using the computer-assisted software helped me keep records of the nodes and I revisited their content on multiple occasions. Each (parent) category described the content (child and grandchild). I also included the mapping of the coding to link the main headings of the thematic analysis (Figure 6, page 55).

Figure 7. Relation between the various components of the research

Objectives	Planned outcomes of the study	Research questions	Design	Methods to produce data	Source of information	Timing
Advantages and challenges of WHO assessment tools & systems to measure its performance in EPR at country level	Critique on WHO accountability systems in countries in the context of results-based management	What type of accountability systems is WHO using and are these appropriate in the results-based management framework?	documentary design	collection documentary material	WHO public, on request to WHO	independent from field work
			qualitative interview study	key informant interviews	WHO HQ, RO, Country team	
	Understanding on what "results" in EPR at country level means to the various stakeholders	What were the major changes with respect to the EPR in the two countries studied since January 2004?	documentary design	collection documentary material	CCS, Country docs on request	during field visits
			qualitative interview study	key informant interviews	Country MOH, stakeholders, WHO Country team	
Address the WHO contribution in terms of results and impact in EPR in the two countries studied			qualitative interview study	focus group	Country team	
	Discussion on issues related to the attribution of results in EPR to WHO contribution in the two countries studied	What was WHO contribution in the area of EPR since January 2004 in these two countries and how was it reported?	documentary design	collection documentary material	On request to country team and SEARO	related to field visits
		What constitutes results in EPR to WHO and the main stakeholders in health?	qualitative interview study	key informant interviews	WHO Country team, MOH, stakeholders	
		What results in EPR in the two countries could be attributable to WHO?	qualitative interview study	key informant interviews	WHO Country team, MOH, stakeholders	during field visits
			qualitative interview study	focus group	Country team	
Propose options for assessing WHO cooperation effectiveness in EPR at country level	Discussion on generalization of results (other programmes, countries, users)	How is WHO estimating these changes and its contribution to the changes (attribution)?	documentary design	collection documentary material	WHO public, on request to WHO	independent from field work
	A set of options that WHO could adopt when assessing the impact of its contribution to other settings	What are the common issues in these two countries and how do they conform with evidence from other sources?			Data generated in study	after field visits

c) **Comprehensiveness.** I analysed systematically and completely the data generated, and avoided predilection to prove any theory. Using the computer software helped me to systematize the analysis of the data that the interviews generated. In addition, I provided proportionality to the quotes selected whenever I judged this meaningful.

d) **Thoroughness** addresses the authenticity of results of the research. Its main thematic issues were compared within the various methods to generate data (interviews, documentary material) and between the groups involved (WHO, MOH, other partners). I looked into deviant cases that could disconfirm the evidence of how WHO contributes to and/or assesses results critically, and brought these into the analysis.

e) **Reliability** refers to the consistency across researchers, methods and observations over time. As a single researcher, I approached the collection of qualitative data uniformly, thus ensuring reliability and more valid cross-comparisons of data. Moreover, I used a single guide for all interviews by stakeholder grouping (Annex 5, Annex 6, and Annex 7, in pages 189 to 192). The quality of the analysis and conclusions was checked by the current DrPH supervisor and by the previous one. In addition, the draft of this research was discussed with academics at LSHTM. Before submission, a complete draft of the thesis was sent for comments to the advisory committee and their feedback integrated in the final document.

f) **Generalizability.** This criteria relates to the external validity of the study. It is argued at three levels, including sample-to-population extrapolation, case-to-case transfer, and analytic generalization (Firestone 1993). This research is not representative of the impact that the use of WHO performance assessment has in EPR at country level. However, the inclusion of two country case studies in the research increases its relative comparability to other cases. Therefore, it contains a certain degree of comparability to other WHO evaluative work at country level, in particular when looking at its broad managerial functions. The research attempts to conceptualize the findings and bring them into the current discussion on the use of performance assessment to improve organizational effectiveness. By doing so, it makes an effort to contribute to the knowledge on the results-based management in practice and on the options that the implementers propose.

g) **Application** is about the utility of the research and its ability to improve future practice. There is an interest within WHO to improve its programmatic performance assessment,

with the introduction of an integrated system that is being rolled out at country level. In this sense, the research has uncovered some gaps in the use of the routine assessment system and the need to complement it with other evaluative approaches. At the same time there is an interest to operationalise the analysis of the WHO core presence in countries, towards which, this research contributes. The methods used and findings of the present research are part of these discussions informally. In addition, there is a plan to disseminate the results of the research once the research process is completed. It includes a packing and presentation of the research for internal WHO purposes, with three peer-reviewed publications on the findings (two) and the methods used (one).

3.9 Limitations of the study

This study used qualitative methodologies and therefore presents some limitations inherent to this type of enquiry. In particular, the guiding questionnaire that I used as a tool to generate data was designed for the present research and has not been standardized. Moreover, the research cannot exclude gaps between the participants' real contribution to EPR and what they said that they had achieved (Mason 1996; Brewerton and Millward 2001; Green and Thorogood 2004).

The fact that the research used narrative literature review combined with it being a single researcher study increases its subjectivity, and therefore its possibility of bias. This is a recognized limitation that could have been partly avoided having double blind review of the literature. However, this was not possible because of resource constraints. There was no systematic assessment of the quality of the material reviewed in *strict sense*. However, the material was screened and selected on the basis of the relevance to the research, it being peer-reviewed, or the author/s having credentials in the area of expertise, or/and belonging to a research group with a tradition in the area considered.

The study included the number of partners supporting the health sector as a variable for the selection of countries. This influenced the choice of Myanmar (assuming that very few donors support the health sector) and Nepal (assuming that a considerable number of donors are present). However, the reality was different in the case of Nepal, where the number of partners supporting EPR through the central level of the MOH is few. Therefore, the factors that came into the discussion for explaining the results were fewer than what the research had expected.

Due to time constraints I could not consider some issues fully, and as a result, the research presents some partially-unresolved tensions:

(a) Focus of research vis-à-vis the programmatic structure of the WHO plan of action and national programmes. The research focused on EPR. However, the main events relate to several programmes within the WHO plan of action, and to different national control plans in the MOH, such as malaria, tuberculosis, vaccine-preventable diseases, or EPR.

(b) Scope of public health events of international concern. The research focused on WHO and its partners at central level. However, countries deal with these events at provincial and local levels through a network of stakeholders that this study did not consider.

(c) Focus of the research vis-à-vis the overall WHO organizational setting. The research focused on the practice of results-based management at country level and the analysis did not consider the role of the regional level or headquarters sufficiently. In particular, it did not address the lack of an organization-wide system regarding the development of indicators to operationalize WHO strategic directions and core functions across the Organization, by organizational levels, or by programmes, including EPR.

(d) Although the research focused on the way in which using tools can improve the delivery of results, it became difficult to disentangle issues of management from those on programmatic effectiveness (See Section 3.7, page 53).

The recall period of the study is from January 2004 to July 2007. However, the field work took place from May 2007 to January 2008. Hence, a possible difference between the retrospective reporting versus the contemporary memory cannot be excluded. Some operational issues limited the research as well. For example, I had to replace some informants since they were not available during the period when I visited the countries. I tried to replace these individuals with others from the same organization, but on two occasions this was not possible.

The focus group discussions did not take place and therefore the research missed dialogue generation and interaction between the members of the WHO Country Team. In Nepal, I attended the two-day workshop to review the WHO-MOH plan of action and observed some interactions among participants. However, this was not possible in Myanmar, where the totality of the primary data generation was through individual interviews.

Due to sensitivities that more disclosure about the profile of the country informants could originate, the document remains vague at times. Despite this limitation, I considered this necessary to protect the identity and confidentiality of the interviewees.

In some cases, the responses that I received in the interviews may have reflected some level of "social desirability". Social desirability occurs when a respondent answers in a manner that he/she thinks will please the interviewer. In the present research, there were potential reasons for social desirability in some interviewees since (a) I was enquiring about WHO, which in some cases, funds them; (b) the Asian culture could be prone to social desirability; and (c) some interviewees were aware of my affiliation to WHO.

As this is a single researcher study, the position of the researcher can be a source of bias for both the informants and the researcher. This is a concern in hierarchical organizations, whereas in the current study, the fact that I am working at WHO headquarters could have influenced the responses of interviewees. The fact that I had had previous assignments in Myanmar for WHO cannot exclude some degree of "observer-expectancy effect", despite my efforts to ensure objectivity in the data analysis (for example, analysing transcribed interviews rather than researcher notes only).

3.10 Ethical Considerations

3.10.1 Ethical approval and clearance

The Ethical Committee of the LSHTM granted the ethical approval of the research in May 2007 (Annex 13, page 203). This was important and necessary because of the potentially sensitive information that could emerge during the interviews with key informants (primary data).

The present research used secondary data about Myanmar and Nepal that is available in the public domain and therefore, I did not deem necessary an ad-hoc ethical approval for this component. Moreover, I used secondary data from WHO on its country operations, and on the management of the EPR programme and its resources. These are public documents, since WHO collects data using standardized tools throughout the Organization and reports the results to the World Health Assembly. Therefore, I did not deem necessary a special ethical approval for the use of this material in the context of the present research.

The research is about WHO as an organization and the WHO Regional Office for South-East Asia cleared it. In addition, WHO representatives to Myanmar and to Nepal obtained the clearance for the field study from the MOH of these countries.

3.10.2 Consent

All interviews were requested in advance in writing. Each request included the questions of the interview (See Annex 9, page 198) and a briefing of the research (Annex 8, page 194).

In addition, I briefed all interviewees with the information sheet and asked them to sign the consent form prior to starting the interview (Annex 10, page 199). All interviewees consented verbally to the interviews; and all of them, with some exceptions[21] signed the consent form.

3.10.3 Confidentiality

All interviews took place in offices that the interviewees chose after I explained the nature of the interview. Some participants invited other colleagues to be present during the interview, while others suggested that the interview take place in an office other than theirs for reasons of privacy. I was the only person to know the names that could lead to the identification of the individuals who participated in the interviews. I kept all records locked to avoid disclosure of primary data.

When I considered it necessary to quote individuals, I did so anonymously. I assigned a reference number to each interviewee (See references in Annex 6 subsection B, page 191, for Myanmar and in Annex 7 subsection B, page 193, for Nepal). In addition, I assigned alphabetical letters (only for Myanmar, since some interviewees so required) when they responded as individuals belonging to clusters of stakeholders (MOH, other national stakeholder, WHO, other international stakeholder). I did so to guarantee that no tracing back to the source of information was possible.

3.10.4 Standpoint of the researcher

I am an employee of WHO headquarters. I work in the Evaluation and Performance Audit team within the Office of Internal Oversight Services since 2004. Prior to this, I worked a number of years on EPR in the WHO Department of Communicable Diseases Surveillance and Response.

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[21] Eight people in Myanmar did not sign the written consent form. In four cases, I handed over the form but they did not give it back to me signed. In four other cases, the interviewee held a senior position and I felt uncomfortable requesting a signature and thought that granting the interview sufficed.

During most of the research period, I took special leave of absence without pay from WHO to minimize any potential issue of conflict of interest between my position as a WHO staff member and as researcher on a management issue in the WHO Country Team. Moreover, prior to visiting Myanmar and Nepal, and prior to interviewing individuals for the data collection used for this study, it was made clear to all parties that I was not acting as a WHO employee, but as a LSHTM researcher.

The WHO Regional Office for South-East Asia facilitated contacts with the WHO Representatives in the two countries studied. They obtained the necessary clearances from the MOH. The WHO Country Offices facilitated some logistics of the interviews. However, I presented myself as an independent researcher from the LSHTM (DrPH candidate), in order not to raise "doubts" as to the objectivity or "suspicion" on the nature and objective of the study.

During this study, I was aware of my position as both researcher at LSHTM, and staff member on leave of absence from WHO. In addition, I had visited Myanmar as part of two WHO assignments in 2003 and in 2004, as well as the WHO Regional Office for South-East Asia on several occasions in recent years. Therefore, while gathering data from some of my colleagues, I knew some of the factors that could influence the content of the interviews. In this sense, I was aware of the risks of preunderstanding and made efforts to reframe my understanding of the situations I was already familiar with. Inevitably, I could explain situations differently and therefore, I account for the personal reflexivity throughout the research (Soros 1994; Chia 1996; Brannick and Coghlan 2007; Walt, Shiffman et al. 2008). The fact that I had interacted with various stakeholders in Myanmar and in the WHO Regional Office for South-East Asia in the past facilitated the contacts, and the sense of "trust" and "knowledge" about the situation that I tried to address through the research.

4 Myanmar Case Study

This chapter presents the findings of Myanmar as an individual case study. The case study introduces the country and its system to deal with major events related to infectious diseases and epidemics, and WHO country work. This is done succinctly, while Annex 14, in page 204 provides more detailed background information. Then, it provides a descriptive analysis of the data generated around three core themes: events, "results", and WHO Country Team. Annex 15 in page 208 illustrates the clustering of the information towards these themes. These themes represented the most convenient fit to the organization of the material gathered through the interviews in both countries (See Figure 6, page 55), and are used to discuss the conformity to the programme theory guiding this research (See Figure 4, page 43). Finally, the chapter summarizes the main issues that will be brought forward in the discussion on commonalities and differences between the two countries and the implications for WHO assessment of EPR in countries.

4.1 Background

Country

Myanmar has a population of 52 million, of whom 30% live with less than US$ 1 per day. The country is among those receiving lowest levels of assistance in the world. Public investment in education and healthcare is amongst the lowest in the world (DFID 2008).

Myanmar's political system has been a military-led government since 1962. In 2006, Myanmar experienced much internal instability that resulted in casualties and population displacements (Encyclopædia-Britannica 2008).

For the Development Assistance Committee of the OECD, Myanmar is a fragile state that needs special attention because it has low or declining resource allocations and high level of needs, and because it lacks coherent approaches to international engagement (OECD/DAC 2006). Myanmar is included among the conflict-affected low-income countries under stress without a World Bank country policy and institutional assessment together with 18 other countries (World-Bank 2006)

Addressing infectious diseases

Myanmar addresses major infectious diseases through its national programmes hosted at the MOH. Some of these national programmes focus on specific diseases and are well structured with their own surveillance systems . Other programmes deal with emerging diseases through the National Plan of Action on Integrated Disease Surveillance and Response, under the Central Epidemiological Unit (Table 20 in Annex 14, page 206). In 2000, the country established the Integrated Disease Surveillance System as to fight infectious diseases in the Mekong Basin region, and added a response component in 2001 (The-Rockefeller-Foundation 2007).

In 2003, the MOH assessed its national surveillance system, and identified the National Plan of Action for Integrated Disease Surveillance in 2004. In 2004-2005, the MOH developed guidelines and the workshop model to train the Rapid Response Teams. The training of Rapid Response Teams rolled out to state level in 2007, and will do so to divisional level in 2008. The National Plan served to develop the Action Plan against Human Pandemic influenza.

The development of generic health information systems at central level receives little support from external stakeholders with the exception of WHO. In addition, Myanmar receives *ad hoc* support for specific purposes (Boned-Ombuena 2007).

Myanmar is part of several regional networks related to EPR, including the Association of South East Nations and the Mekong Basin Project. The former became involved politically and financially through the establishment of a trust fund to fight SARS (Ashraf 2003; Curley and Thomas 2004; Caballero-Anthony 2005). The Mekong Basin Project supported epidemic preparedness by fostering an integrated disease surveillance system (WHO 2003).

Figure 8 (in page 67) portrays the events that the interviewees considered critical in addressing major events related to epidemics at various levels. These include the WHO country office, the Myanmar health sector, the national level, and the international/global level. The basic structure of this critical event map was designed with information from documentary sources; and the map was gradually constructed through an iterative process during the interviews.

Figure 8. Critical Event Analysis, major events related to infectious diseases and epidemics, as seen by interviewees, Myanmar 2007
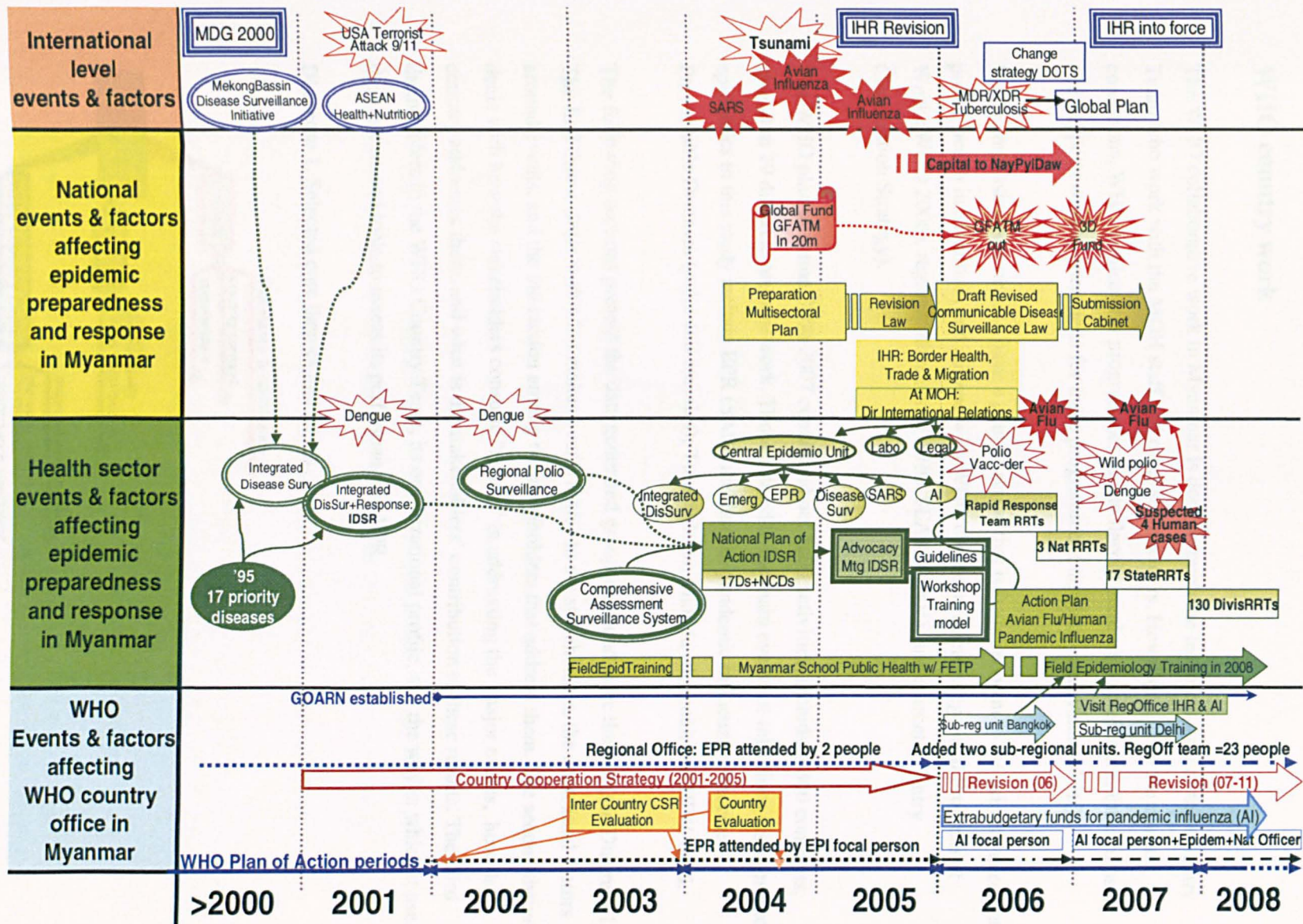
WHO country work

The WHO collaborative work in Myanmar is done through the technical staff of the Country Team who work with the MOH staff and other stakeholders. However, due to the country conditions, WHO implements programmes (acute flaccid paralysis surveillance, tuberculosis) and supports routine operations for these programmes (supplies, supervisory visits).

WHO emphasizes the need to have a plan of action that is both, relevant to the priority needs in public health in Myanmar, and aligned with WHO corporate interests (general Program of Work (WHO 2006), regional directions (WHO-SEARO 2004), and current Country Cooperation Strategy).

The WHO plan of action 2006-2007 contains about 1200 activities, including 800 contracts, spread in 29 different areas of work. Those related to the main events of infectious diseases and epidemics in this study include EPR (SARS and human pandemic influenza); Vaccine-Preventable Diseases (polio and measles); Tuberculosis; Malaria (dengue); and HIV/AIDS.

The following sections present the data generated grouped around three themes (see Diagram 1). The first theme deals with what makes events *major* to the stakeholders, the contextual factors around events, and the interaction among the stakeholders that address them. The second theme deals with how the stakeholders construe "results" in addressing the major events, how the country addresses them, and what is the stakeholders' contribution to these results. The third theme refers to the WHO Country Team, its organizational profile, and the way in which it uses the systems and tools to assess its performance in EPR.

Diagram 1. Selected core themes and issues
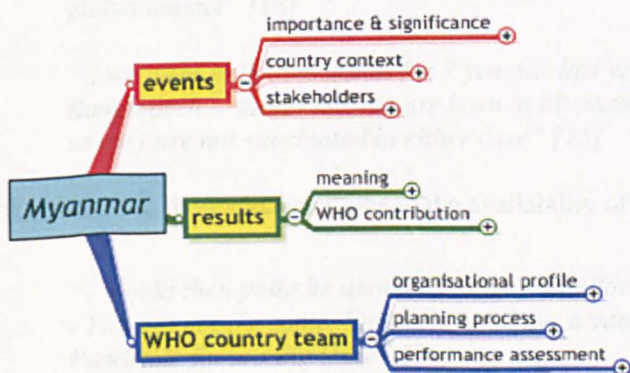
4.2 Major events related to infectious diseases and epidemics, and context

Several themes came across in relation to the major events related to infectious diseases and epidemics since January 2004. These included the importance and significance; the country context; and the stakeholders

4.2.1 Importance and significance

There was not a single characterization for what constitute "major events of infectious diseases and epidemics", and the interviewees referred to them in relation to several aspects as illustrated in Diagram 2 below.

Diagram 2. Importance and significance aspects related to the major events of infectious diseases and epidemics in Myanmar since January 2004
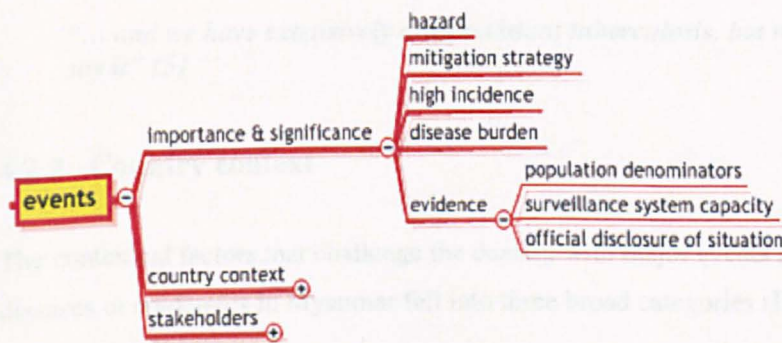
The importance of events related to their high epidemic potential, despite having low probability of occurring. In these cases, there was a transboundary notion embedded:

> *"... not happening here, but for example, **SARS** or **avian influenza**. These may have a global impact"* [18]

> *"...we were polio free status for 7 years... last year there was an outbreak of **polio** in Bangladesh... these children are born in Myanmar, but live in India and Bangladesh, ... so they are not vaccinated in either case"* [15]

The hazard in these cases pertains to the availability of mitigation mechanisms :

> *"- Would then polio be another example (similar to avian/pandemic influenza)?*
> *- Yes, but not the same. For polio you have a vaccine for. It is not a real big issue. Pandemic flu is a big issue"* [26]

The transboundary perception implicit in the above comments contrasted to the perception of importance attached to these events in which the probability of them happening dominated (diarrhoeal diseases), or to those with high disease burden, rather than a *sudden* hazard or risk.

Some interviewees attached significance to some diseases despite the lack of evidence due to:

- Lack of reliable population denominators disaggregated at an appropriate level for epidemiological purposes:

"The situation in our country is that the last census was done in 1993. This is a problem... We use the last census and adaptations" [15]

- Current capacity of the surveillance system:

*"... there is no good knowledge of the pattern of diseases, for example, **typhoid fever** or **leptospirosis**; we do not know what the real burden of disease is..." [3]*

- Official disclosure of the situation by the health authorities:

*"... and we have **extensively drug resistant tuberculosis**, but the Government does not say it" [5]*

4.2.2 Country context

The contextual factors that challenge the dealing with major events related to infectious diseases or epidemics in Myanmar fell into three broad categories (**Diagram 3**).

Diagram 3. Country context and major events in Myanmar
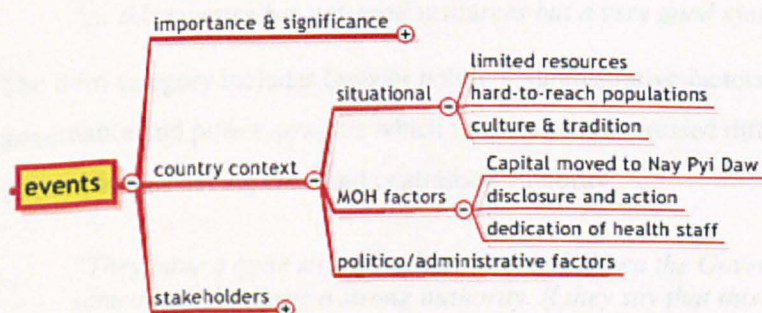
The first category included situational factors. These referred to the country having limited resources to control major events, hard-to-reach populations, and to existing culture:

"The (dengue) problem is that people do not have continuous provision of water and keep it in basins... they do not like disinfectants in water because it smells... Only if there is an outbreak people pay attention. When cases go down life continues as before" [iv]

The second category groups factors impacting the way that the Government of Myanmar, in particular the MOH, addresses major events and epidemics. It includes the restrained day-to-day relations and coordination of activities with MOH staff, after the capital moved to Nay Pyi Daw in November 2005:

"- How are the intersectoral coordination meetings (for epidemic response) held?
- ... well, all sectors are there (Nay Pyi Daw), but technicians are here (Yangon)..." [i]

Disclosure and action was interpreted within country tradition and culture:

"...Government never declares an emergency. The Government believes that we do not need to declare that we are suffering. This is our tradition... From an international perspective this is different... This culture makes work very difficult" [i]

At the same time, the interviewees alluded to the government, in particular the MOH, being more open and transparent when dealing with epidemics than when dealing with other matters:

"It is very unusual for the Government of Myanmar to share its strategy ... but in the field of infectious diseases we have the foundation to do so..." [iii]

There was an implicit praise to how the health staff was coping with the scarcity of resources for their daily work[22], and how this could have contributed to the relatively good performance in epidemic control:

"My impression is that this country has done much better (for avian influenza) than others with more resources" [i]

"... this country has not good resources but a very good system and motivation" [iv]

The third category includes broader politico-administrative factors related to the country's governance and power, towards which interviewees expressed different views. Some saw the government as having clear and centralised authority:

"They have a quite strong authority behind. When the Government here is behind something, they have a strong authority. If they say that this is what should happen, you have to comply. These regimes can do that" [iii]

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[22] Including difficulty with transport, telephone communication. Per diem of MOH staff is 15,000 Kyat. At the time of the research the approximate exchange rate was US$ 1 = MMK 1,250.

However, other interviewees referred obliquely to 'strange accusations' and corruption, and suggested that some NGOs had a 'schizophrenic' attitude to health services because they were government services. In other words, they felt compelled to work closely with the government, but did this rather reluctantly.

4.2.3 Stakeholders

This section focuses on the relations between the stakeholders dealing with major events or epidemics (Diagram 4).

Diagram 4. Stakeholders' issues and major events in Myanmar
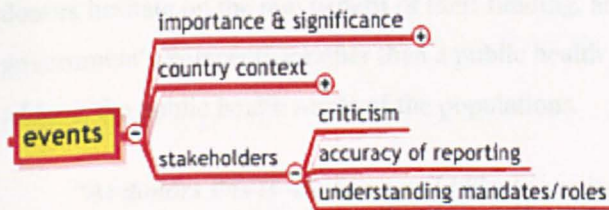
Firstly, the interviews reflected criticism among stakeholders with respect to their roles or strategies in Myanmar. Some stakeholders contested the donors' perspectives, because of their emphasis on project success, timely budget expending, and short term results, which they saw as a detriment to sustaining achievements in the long term.

> *"Donors have decided that what they want is to go directly to beneficiaries. They do not want money to go to health services, no capacity-building. They want their dollars to be matched with number of patients getting the services in the field. Of course we know that that is not probably the right approach"* [i]

> *"...but the (Three-Diseases Fund) fund cannot be delivered to the Government...Now many NGOs are approaching for funding. But who will coordinate this programme?... The international NGOs also need link with Government..."* [iii]

Other interviewees viewed the role of the NGOs as limited in scope and public health impact, although they recognized the quality work in *difficult* areas:

> *"NGO are fragmented and have no countrywide impact. Looking at what they do they are very expensive. Because they have restriction movements. We do not see much of their impact. You know how the NGO work, they go to one area and they do what they like"* [i]

Some interviewees resented WHO for supporting the Government unconditionally, and which refrained them from collaborating further, while other interviewees considered this nearness to their advantage.

> *"WHO works very closely with Government. WHO provides these functions to the Government, not to international NGOs, that hardly receive any technical support from WHO" [iii]*

> *"...having WHO as a partner, we can have more credit from the Government and also have more acceptance from them and open a technical discussion... and from our point of view to get proper and good dialogue with Government... " [iii]*

Secondly, there is a feeling that what stakeholders report does not reflect the reality. As a result, donors hesitate on the real benefit of their funding, and believe that WHO, by supporting the government's perspective rather than a public health perspective, looses opportunities to address the public health needs of the populations.

> *"As donors this is what we would like to see in the reports. "We have done this and this, people know this and this. But the people with whom we work are underpaid, they have two jobs because the cost of living has increased 15% in the last two months. We have problems with motivation"... This is the type of feedback that we need as partners... We need a more complete picture of what is happening" [iii]*

Thirdly, stakeholders do not feel that others understand their roles well. This resulted in them having to fulfil their mandates in hostile environments:

> *"The key question becomes who is supposed to coordinate (outbreaks). Is it that because it is dengue is WHO? Or is it that because it affects children that UNICEF should coordinate? Or is it that because there is an international NGO working in the area is this NGO? Is it that because it is a humanitarian response is the office of humanitarian assistance who should coordinate?" [iii]*

Despite these contextual country conditions and varied perspectives, stakeholders seem to pull their efforts together to tackle the major events:

> *"- Why donors decided to support it (the plan to address avian influenza)?*
> *- Our headquarters saw the issue and thought that we needed to respond... This is one of the few issues that excites X (a country)" [iii]*

4.3 Meaning of "results" and WHO contribution

There are two themes in what results mean to the stakeholders and how they perceive WHO as contributing to these:

- Meaning (programmatic terms, addressing the events, absence of results) (**Diagram 5**)
- WHO contribution (core functions, presence, other support, "WHO not there") (**Diagram 6**, page 79).

4.3.1 Meaning of results

The meaning of results was explored through questions on the components and achievements of the national programmes to address the major events, on successes in addressing the events, and on what they had failed to achieve when dealing with the events (**Diagram 5**, page 74).

Diagram 5. Aspects related to the meaning of results, major events, Myanmar
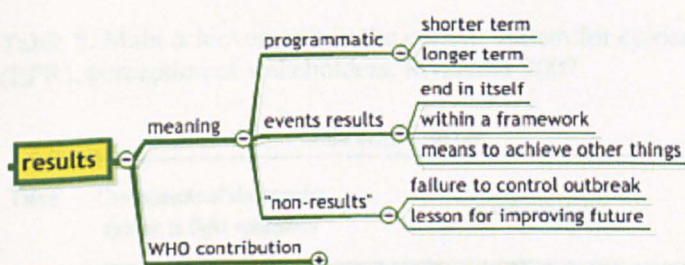
Programmatic terms. Nineteen interviewees referred to the major components to fight major events or epidemics in Myanmar through 37 explicit comments. These major components fell under two broad time-related categories. The components that fell into a shorter time period category included outbreak verification and response; Rapid Response Teams; coordination of preparedness and response plans; and sharing of the current disease control plans. The components under a longer time perspective included surveillance; strengthening of national control programmes; national capacity-building, private sector and community involvement; and political commitment (**Table 7**). These comments were distributed unevenly. The national stakeholders (NGOs and MOH) attached more importance those components within a longer time perspective (14 out of 22); whereas the international stakeholders ascribed more importance to those components situated in a shorter timeframe (9 out of 15).

Table 7. Main components in the current system to fight against major events of infectious diseases and epidemics, perceptions of stakeholders, Myanmar 2007

Time	Main components Current system	National		International		TOTAL (N=19)
		NGOs (n=3)	MOH (n=5)	WHO (n=3)	Other (n=8)	
Shorter	Outbreak response	1	1	2	1	5
	Rapid Response Teams			1		1
	Preparedness plan	1	3		3	7
	Shared Nat. Control plans	1	1		2	4
Longer	Surveillance		4		3	7
	Strengthened Nat. Control plans		2		3	5
	National capacity building		4			4
	Private sector involvement	1				1
	Community involvement	1				1
	Political commitment	2				2
	TOTAL	7	15	3	12	37

Table 8. Main achievements in the current system for epidemic preparedness and response (EPR), perception of stakeholders, Myanmar 2007

Time	Components of the current system to fight epidemics	Specific elements	National		International		TOTAL
			NGOs (n=3)	MOH (n=5)	WHO (n=3)	Other (n=8)	
Shorter	Outbreak response	Coordinated response Outbreak controlled "Absence of cases"	1	2	2	4	9
	Rapid Response Teams (RRTs)	RRTs trained		1	1	1	3
	Preparedness plan	Resources mobilised Shared EPR plan		1		1	2
	Shared Disease Control plans						0
Longer	Surveillance	Laboratory services improved Surveillance strengthened		1	1	1	3
	Disease control & prevention	Elimination and/or reduction of morbidity and/or mortality	1	11		3	15
	National capacity building	Model used for other situations Long term training*			3	2	5
	Private sector involvement						0
	Community involvement						0
	Political commitment	Decentralisation to districts Revision CDS** Law Political commitment	1	2	1	1	5
	TOTAL		3	18	9	12	42

*= in epidemiology, management, broad public health
**= Communicable Diseases

The same interviewees elaborated on the main achievements of the programmes to fight epidemics through 42 specific remarks. These achievements were assigned to the component that they related to most (**Table 8**, page 75). As previously, the national stakeholders assigned more importance to the achievements situated in a longer time perspective; while the international stakeholders positioned more of the main achievements in the short term.

Results in addressing major events or epidemics since 2004. The interviewees expressed "results" that could be grouped under three broad categories:

Results as a health outcome/ an end in itself. This included results as the obligation of doing what is right for the group despite individual interests:

> "The farmer noted that he had dead birds and notified it immediately... the Government acted very quickly...In the past and in other countries what happens is that bird producers are reluctant to notify the birds dying because they immediately loose their source of income because of the culling and also because of the compensation...Comparatively speaking they are doing really good job" [24]

Moreover, it included the notion of disease burden reduction. In particular, diminishing its incidence through preventive measures involving communities in the implementation of preventive measures (malaria with impregnated bed nets), building local capacity (malaria), through education and counselling (tuberculosis and HIV/AIDS), or protecting people from infection (measles). Results expressed reduction of mortality, through the provision of adequate treatment (tuberculosis and cholera) as well.

Finally, some interviewees referred to results as "taking it away"; where the "it" is a problem or confusing situation. There were some references to "all being controlled" (measles), or "being already finished" (SARS).

Results as part of a process or framework. Interviewees referred to results in relation to the fulfilment of their organizational mandates responding to country or to local needs (avian/ pandemic influenza), and ensuring that policies of their respective home agencies are informed.

> "It is very clear that a global level there is collaboration with WHO and our organisation. But then, also there is at country level that WHO needs to advice us and the MOH ... So we try to support MOH" [18]

Other interviewees expressed results as a function of programmatic targets, or outputs of plans (polio, measles). Finally, results meant "belonging" to within-country or international networks. Within-country networks included those that lead to coordinated mechanisms, shared plans, clearer roles and responsibilities, and joint action (pandemic influenza)

> *"There are no cases of Human avian flu yet. So it is very difficult to say what is result. But the basis for coordination is established. This is a very good result. Also the dialogue with the MOH is very good. This year the bird cases were found again and the news were shared with the public quickly. This is maybe the result of the coordination mechanism and they are very willing to do so" [23]*

and those that lead to chaotic action with no clear outcomes (dengue)

> *"...the Government starts requesting material from several agencies... And we discovered that another agency is providing the same material (posters). We were on the blink of printing them. Same with leaflets...So we cancelled our order" [20]*

Results from an international network perspective translated in addressing major events or epidemics "properly by international standards" (measles, tuberculosis, polio, SARS).

Results as a means to achieve other things. Firstly, results were the expression of what gives credibility and translates into government legitimacy *vis-à-vis* the international community. For example, the government having transparency (pandemic influenza), acting timely (polio), or responding to stakeholders' expectations (SARS). In particular, this would be by adhering to coordination of strategies agreed nationally (pandemic influenza) or by being part of an agreed national strategy that is internationally validated through governance mechanisms, including external evaluations (Stop TB, Roll Back Malaria).

> *" ...also we are developing a standardized manual for general practitioners with other partners and the National Tuberculosis Programme. And we also have a close collaboration for external evaluation of the national programme" [25]*

Secondly, results *validated* situations, as was the case of the MOH change of attitude towards the general practitioners using them as part of the health system (HIV/AIDS, polio).

> *"After 5 years, we find that private practitioners are interested in this training and the Government changed its attitude about general practitioners and use them" [22]*

Thirdly, results were referred to as part of a broader perspective of health in terms of human rights. For example, doing something for the poorest "because they are the most vulnerable" (counterfeit drugs against malaria, or bringing down the number of defaulters to prevent extremely resistant tuberculosis from developing).

Lastly, results alluded to added positive externalities. For example, the micro-stratification methodology that is being replicated for malaria nationwide, after successful project experience from an agency, and the planning process (pandemic influenza) that is being used for other diseases, or by other agencies (World Bank) in other countries. The capacity-building associated with the participation in coordinating committees enabled replication and know-how transfer (SARS, malaria, pandemic influenza) setting the basis of trust among stakeholders (pandemic influenza).

> *"But well before, the Government had prepared a pandemic influenza contingency plan ... Myanmar was prepared for the introduction of the virus including the coordination mechanisms with other partners. So, all of them were on board when needed" [17]*

Lack of achievements in the response to these major events. "Failure" in addressing major events illustrated two situations. Firstly, it was largely associated with "not controlling the situation" due to several reasons. These reasons included difficult field conditions (hard-to-reach populations, and house-to-house vaccination during rainy season), socio-economic and cultural factors (erratic provision of clean water in remote areas or fear to burn rubbish (dengue)), and having a response dependent on deficient grounds (absence of reliable denominators for immunization), or that was insufficient (National Immunization Days for polio in 2006; exclusive focus on educational community preventive measures for dengue).

> *"We treat cases of dengue as you can treat them. It is very difficult to prevent it as far as I know. Here, I do not think that preventive measures will be easy to do... It is flooded even in dry season." [24]*

Secondly, "failure" to address the events related to learning from the experience and overcoming future situations. It was often referred to "something that was missed" in one event and that allowed its addressing at a later stage[23].

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[23] In particular, the strengthening of the public health laboratory services network, and the building of capacity at regional and local level for pandemic influenza.

"The (pandemic influenza) surveillance system and the lab were not good then. But now is different. In 2007, we have four suspect cases human and were discharged in 24 hours because we can make do confirmation test. I would not say that this was a weakness, but a challenge" [5]

"Failure" served to identify new issues that need further addressing as well. For example, during the response to pandemic influenza, interviewees felt that the economic compensation to farmers was erratic and inappropriate. Interviewees felt that Myanmar, where resources are lacking, needed a specific compensation mechanism. This mechanism should be part of a social package agreed within a regional inter-country initiative.

4.3.2 WHO contribution to results

The contribution of WHO towards addressing the major events was analysed against WHO core functions in countries (WHO 2006) and against other support that the interviewees viewed as important, including its core presence. The contribution to results was approached through the hypothetical losses in the case that WHO were not in Myanmar (**Diagram 6**, page 79).

Diagram 6. WHO contribution to results, major events, Myanmar
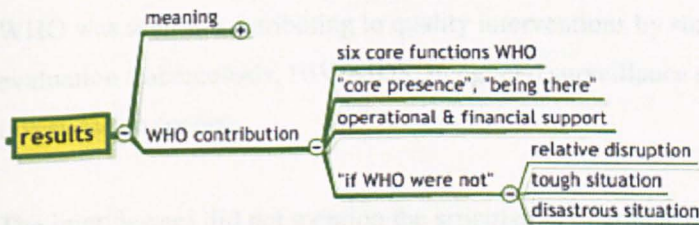
Providing technical assistance ranked highest among the contributions that WHO made in the view of most stakeholders. The dominant view was that assisting technically was the most important contribution in EPR when comparing to the other functions of WHO in countries; and that control of infectious diseases was the most important area when comparing to the other areas of work that WHO supports in Myanmar. The contribution of technical assistance was put forward as having the capacity in country to *'accompany'* the programme (tuberculosis, malaria) or by bringing it to the country in case of epidemic situations (pandemic influenza, polio).

Contrary to the above, one interviewee considered that the technical assistance that WHO provided in one of the programmes related to this research was misleading the national policies for disease control for two reasons. Firstly because it failed to denounce the real extent of the

programme in relation to that specific disease, and secondly because it failed to advise on adequate national treatment protocols in time.

WHO was seen as contributing to fostering partnerships and mediating between the Government and stakeholders. WHO contribution resulted in additional resources from donors towards EPR (pandemic influenza). At times, the contribution towards partnership and joint action was seen as late or ill-defined (dengue), while in other situations WHO contribution to the process was clear (polio, pandemic influenza).

The contribution to building the country's capacities was seen as critical, since WHO is one of the few agencies training staff of the MOH and some local NGOs. National stakeholders appreciated the opportunities to attend seminars and workshops that WHO provided, and to train abroad. At times, these training opportunities were seen as too theoretical and not always adapted to the practical know-how that the country needed most. It was made clear that WHO had contributed to improving the technical and managerial capacities of the health staff. However, the interviewees –apart from the individual benefits to those staff trained- were unclear about the contribution that this training had had in terms of public health gains.

WHO was seen as contributing to quality interventions by standardizing tools for programme evaluation (tuberculosis, HIV/AIDS, integrated surveillance system), and outbreak investigation (polio).

The interviewees did not mention the articulation of ethical and evidence-based policy positions, shaping the research agenda, or monitoring the health situation as examples of what WHO had contributed to in the fight against major events of infectious diseases or epidemics. WHO direct financial contribution was perceived as critical and timely. It was often linked to comments on scarce financial resources at the MOH, and to Myanmar being *a poor country*.

At times, the contribution of WHO was ill-defined. Interviewees defined it as "accelerating" or "anticipating" the policy process (tuberculosis, HIV/AIDS) as something that happens differently from the provision of the technical assistance mentioned earlier. Other interviewees thought that WHO "had done a lot", or "had contributed much". However, it was unclear if this meant that a considerable amount of WHO resources was invested in Myanmar or that the amount of the WHO resources meant a lot for Myanmar.

The notion of "having contributed much but knowing little about health outcomes" came out on various occasions (surveillance system, capacity-building). On the contrary, immunization (polio, measles) had a more linear relation between contribution and health outcomes, because "immunization had proved to be a cost-effective intervention with specific outcomes".

Attribution of health outcomes would be clearer in small-scale projects of NGOs. However, in larger scale interventions or in a national programme attributing outcomes to particular stakeholder interventions was seen as complex and problematic. This is more so in the case of WHO because it is not a direct service provider:

> "...what donors would like to see is how many patients WHO cured with their funds. But this is not a WHO result because this relies on the implementation of the national programme. WHO provides technical support, develops guidelines, builds capacity, and mobilizes resources, but WHO does not implement" [i]

There are initiatives that the MOH implements because of WHO direct intervention (methadone use to reduce harm in HIV/AIDS intravenous drug users), or fostering policy changes (treatment protocol of malaria), where the anticipation role or technical leadership is more traceable.

In the area of EPR, the appropriation of results by WHO was viewed complex. This was due to the impossibility of estimating the results of global interventions or establishing baselines for comparison, for example in interventions of the GOARN. It was also due to WHO not doing as other agencies "that invest on baselines on their specific projects and therefore can measure progress", but rather be involved in wider support. Therefore, only when WHO had a project-like involvement, there would be a more direct link (pilot study on the tuberculosis intervention on defaulters in two townships). However, WHO lacks resources to scale up the project, and therefore the direct value of this intervention from a public health perspective is limited.

The interviewees considered that the way in which resources come to WHO for supporting programmes is a complicating factor. In Myanmar, the trends are to fund interventions through WHO by seconding staff, or to fund WHO staff positions. In these cases, attributing outcomes - and even contributions - to these stakeholders in traditional terms becomes complex. Several interviewees implied that WHO overall involvement in the process was fundamental, and more important than its financial contribution. One alternative to approach contribution to outcomes could be through joint programmatic reviews of the intervention or programme. These joint reviews have other added benefits, such as capacity-building and information-sharing.

Issues on the WHO value in addressing major events of infectious diseases and epidemics were approached through the question of "what would happen if WHO were not in Myanmar?". Twenty-one interviewees responded to this question. Their answers fell under three broad groups (**Table 9**, page 83):

- **The situation would remain mostly unchanged and other stakeholders would need to come in.** Other partners would occupy the current niche of WHO support. Most of the interviewees in this group considered that the lack of technical assistance to EPR-related programmes would worsen the control of infectious diseases/epidemics in Myanmar. One interviewee regarded the work of WHO in a specific programme as being inefficient, and more harmful than useful, "because WHO failed to advise the MOH as they should" Interviewees in this group included well-structured programmes at the MOH or NGOs that have little support from WHO.

- **There would be great loss and the situation would be tough.** This was the predominant view among interviewees. In particular, the MOH at all levels would undergo difficulties. This would be due most importantly to the loss of WHO technical assistance and its contribution in the area of advocacy and partnerships. There would be less national capacity built and less promotion of international norms and standards in EPR areas. The interviewees mentioned WHO's "being there" as an element of value in itself that would be lost. They considered that there would be less funding and with it, a loss in the ability to investigate and respond to outbreaks, and to carry out surveillance activities at divisional levels. The dialogue with the MOH would become difficult, and Myanmar's links with the international community would be restrained as well.

Although the situation would become tough, some national stakeholders believed that "the country would need to go on"[24]. Therefore, the situation was not felt as catastrophic, but rather as a question of sovereignty.

- **The situation would become disastrous.** The MOH at all levels would face financial limitations for its operations since WHO would no longer support them or would not help mobilize additional resources. There would also be less partnership work, and more people affected if an epidemic struck. There would be support for this position from national stakeholders working closely with WHO, and from some WHO staff.

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[24] Myanmar had experienced WHO leaving the country several decades ago for a period of six years.

Table 9. Different scenarios that Myanmar would face in addressing major events in the case that WHO were not in Myanmar, perceptions of stakeholders (N=21), Myanmar, 2007

	Stakeholders				
	National NGOs	MOH	WHO	Other external partners	Total
Relative disruption	-	1	-	2	3
Tough situation	3	4	4	4	15
Disastrous situation	1	-	2	-	3
TOTAL	4	5	6	6	21

Table 10 shows the elements that the different groups of stakeholders perceived as most affected if WHO were not in Myanmar. Figure 9, in page 83 maps out these elements as perceived by the groups of stakeholders interviewed. Stakeholders from the four groups agreed that there would be less technical assistance and that partnering in infectious diseases control would be more difficult. There were aspects that stakeholders valued more than others. For example, the national NGOs valued capacity-building, while international NGOs valued more the dialogue with MOH that WHO facilitates. The international NGOs saw WHO as being replaceable, although they admitted, "it would take time and efforts to do so". The value attached to "being there" or to the provision of norms and standards was high within the MOH only, as was resource mobilization for WHO.

Table 10. Elements that would be affected in addressing major events in case that WHO were not in Myanmar, perception of stakeholders (N=22), Myanmar 2007

	National NGO (n=4)	Ministry of Health (n=6)	WHO (n=6)	Other external partners (n=6)	TOTAL
Partnerships and coordination	2	2	2	3	9
Others would need to come in	-	-	2	2	4
Technical assistance	3	3	3	4	13
WHO presence, "always there"	-	2	-	-	2
Epidemic response delayed/limited	-	2	2	-	4
Less health outcomes*	-	2	4	-	6
Financial contribution from WHO	-	3	3	-	6
Training and capacity building	1	-	2	-	3
Norms and guidelines lacking	-	1	-	-	1
Less resources mobilized	-	-	2	-	2
Dialogue with Government	-	-	3	3	6
Less areas of work	-	-	1	-	1
International links hampered	-	1	1	-	2
TOTAL	6	16	25	12	59

*= mentioned in relation to weakened prevention and control programs

Figure 9. Elements that would lack if WHO were not in Myanmar, addressing major events and epidemics, perceptions of stakeholders, Myanmar 2007
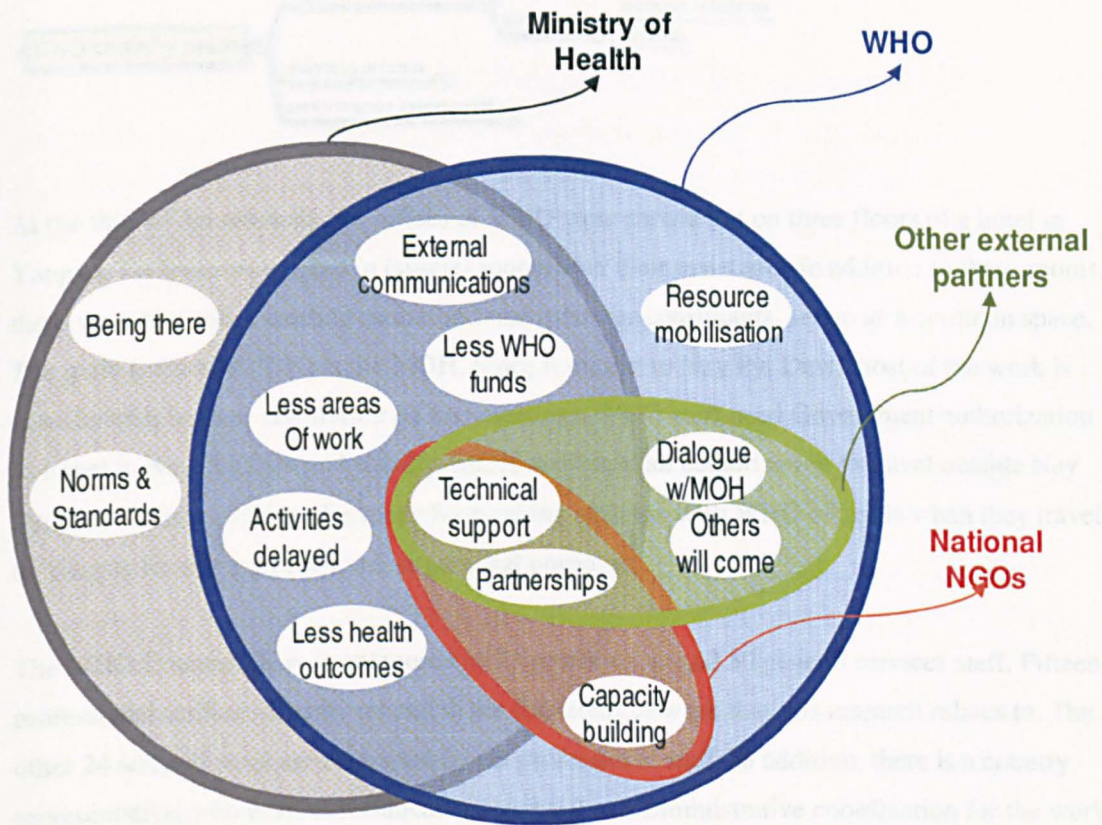
4.4 Country Team

This section deals with three inter-related elements in WHO managerial framework relevant to the research:

- Organizational profile
- Planning process
- Performance assessment (individual, plan of action, programmatic, tools appreciation)

4.4.1 Organizational profile.

This section concentrates on the main aspects that the interviewees put forward in relation to the WHO Country Office and EPR-related work. In particular, the physical setting of the offices, the composition of the team, and its structure, came across as important (Diagram 7).

Diagram 7. Organizational profile, WHO Country Team, Myanmar 2007

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                                               location & office space/s
                                          composition
                     organisational profile
                                               working relations
                                        structure
  WHO country team                                referral
                     planning process
                     performance assessment
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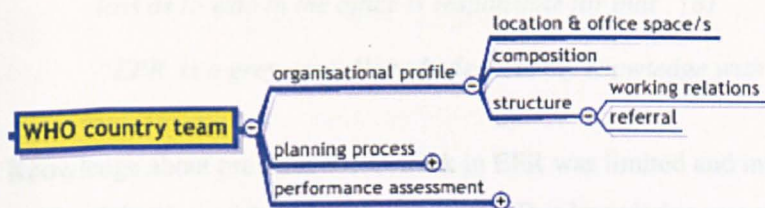
At the time of the research, the offices of WHO were spread out on three floors of a hotel in Yangon. Technicians worked in (single) rooms with their assistants. In addition to these rooms, there were two wider meeting rooms and one room for consultants, set up as a common space. The main partner of WHO is the MOH. Since it moved to Nay Pyi Daw, most of the work is done by telephone or else during *ad hoc* meetings. WHO staff need Government authorization to travel to Nay Pyi Daw and equally, MOH staff need an authorization to travel outside Nay Pyi Daw. Often, MOH staff arrange for working sessions with WHO officials when they travel to Yangon for other professional or personal purposes.

The WHO Country Team is composed of 23 professional and 50 general services staff. Fifteen professional staff are directly related to the five areas of work that this research relates to. The other 24 areas of work are supported by six professional staff. In addition, there is a country representative, who ensures technical, managerial and administrative coordination for the work that WHO does in Myanmar, and an administrator.

The WHO Country Team is organized by areas of work corresponding to the biennial plan of action. Some areas of work have assigned a team of professionals (HIV/AIDS, malaria, tuberculosis, Vaccine-Preventable Diseases). The area of work of EPR had no professional staff specifically assigned to it until 2006. Instead, the epidemiologist responsible for Vaccine-Preventable Diseases was supporting EPR work as needed. Since January 2006, a coordinator for pandemic influenza was appointed; and in 2007 two epidemiologists (one national, one international) were recruited on a temporary basis.

There are weekly meetings for the core WHO Country Team that includes the responsible officers for the main areas of work, and the management team (administration, representative, public health administrator). Additionally, each responsible officer meets with his/her own team, as needed. In the area of EPR, work is skewed towards avian influenza, and leadership on surveillance and response to infectious diseases with high epidemic potential remains unclear.

"If I get a question regarding general surveillance for infectious diseases, I am at a loss as to who in the office is responsible for that" [8]

"EPR is a grey area. Nobody deals to my knowledge with typhoid or cholera" [3]

Knowledge about previous WHO work in EPR was limited and influenced by the turnover of staff and the type of their working contract. This knowledge was most limited among staff with short temporary contracts who had joined the Country Team within the framework of a specific project, and was influenced by the managerial style of the officer responsible for EPR.

The Country Team moved from having few staff with longer period contracts that responded to programmatic needs, to having a considerable number of additional staff with shorter contracts responding to events (pandemic influenza) or situational needs (3-Diseases Fund). This resulted in having more staff on the ground who could report on experiences to enable programmatic progress. At the same time, having more staff demanded developing standard operating procedures. In particular, there is a need to clarify how to share information efficiently and systematically on outbreaks that fall outside the area of work of EPR, with other areas of work.

The Country Team is structured hierarchically as a professional organization. Relations between the WHO Regional Office and headquarters in the areas of the present research are equally so. For example, the responsible officer for the area of EPR in the country communicates with the regional adviser for EPR and the EPR team at regional level for any technical need. If the regional office team cannot provide the support required, it contacts the headquarter level. However, there is little official communication between the country and headquarters outside the regional level and outside the area of work concerned.

4.4.2 Planning process

This section examines several aspects in relation to the planning of the WHO/Myanmar biennial plan of action (Diagram 8).

Diagram 8. Planning process, WHO/Myanmar
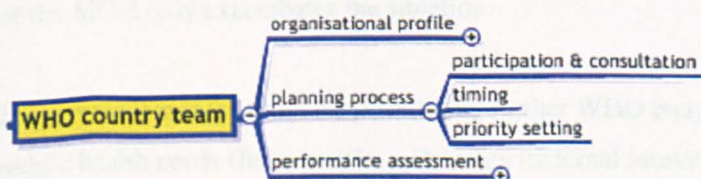
The planning process of the 2006-2007 WHO plan of action started with the identification of regional priority programmes and indicative budgetary figures. These were agreed at the South-East Region Regional Committee meeting of 2004. During 2005, there were negotiations at technical level between staff of the WHO Country Team and the MOH. Subsequently, the MOH held internal meetings to decide on the priorities for support from WHO. These culminated with a last round of negotiations and an agreement between the WHO Country Representative and senior staff at the MOH in late 2005.

The planning process of the 2008-2009 WHO plan of action started with the broad assignment of country budgets at the Regional Committee meeting of 2006. However, due to WHO shifting to planning by strategic objectives, the process included an additional session for briefing and negotiation at the Regional Office in May 2007. This two-day meeting included participation from senior staff of the MOH and of the WHO Country Team, and from all managers of regional programmes clustered by strategic objectives. Back in Myanmar, there were meetings to debrief other staff at the MOH and WHO Country Team, followed by a consensus workshop in Nay Pyi Daw to finalize the draft plan of action for 2008-2009.

> "Before having this kind of books (plan of action), they (WHO) organise a workshop where all managers need to attend. They ask us if we want to continue with what was done in 2004-2005 and if we want to change. It is a kind of evaluation. We also meet with the MOH managers responsible for several projects as in WHO. And decide. This is how we plan during these two days workshop" [13]

The WHO Country Team and the staff at the MOH appreciated the current system of planning better than the previous one. WHO staff considered that the quality of the proposals that were put forward for 2008-2009 to WHO had improved with respect to those of 2006-2007. They also considered that by interacting more with the MOH staff, there was a better understanding of the expectations from both sides and more engagement in the process.

Interviewees from all groups except from MOH considered that WHO should focus more, while recognizing that the needs of the health sector in Myanmar are overwhelming in comparison to the resources available. Having few external partners supporting the central level of the MOH only exacerbates the situation.

It was not clear if the basis for prioritizing further WHO budgetary resources should be the public health needs (for example, addressing maternal mortality, water and sanitation); the

cost-effectiveness of the interventions (immunization); the availability of funding (HIV/AIDS, malaria, tuberculosis, avian flu); long-term investments (decentralization of services, integration of health information systems); or the need to prevent basic services from collapsing.

The planning process is well established and the MOH relies on the resources of WHO to cover the needs that other partners cannot address. Other partners are viewed as "having their own agendas", while WHO remains more permeable to the MOH needs.

> "When talking to other agencies, they are much linked to funding and to the activities that they want to promote. In the case of WHO, the country decides (for the regular budget)" [7]

> "...once the MOH signs the work plan things are quite fixed....Ten or fifteen years ago, this office was small and technical staff could not be involved in so many areas. And then, (resources) were handed over. That has continued... it is difficult to break" [8]

In practice, at the start of the biennium, the WHO plan of action is a mixture of support to:

- First line priorities for the MOH included in the WHO country cooperation strategy. Some of these programmes are mostly backed up by donors (avian flu, tuberculosis, malaria, HIV/AIDS, polio, measles) and by regular budget funds. If this is insufficient, the regional office or headquarters assist with additional resources.

- First line priorities for the MOH that WHO agrees to fund as a temporary solution until other opportunities arise (financial support for routine supervision operations, provision of medical supplies). This represents around 5% of the WHO country resources (Figure 10) and in these cases, the regular budget is used (WHO 2004).

- Support to emergent regional or global priorities for which no previous provision had been made (IHR2005). In this case, regional or global budgets are used until these activities are included in the next biennial plan of action.

Epidemic responses are supported through *ad hoc* resources from WHO regional and headquarters funding, or from those mobilized at country level (avian flu, SARS).

In financial terms, the country regular budget represents less than 10% of the total resources, out of which about 5% for priorities within the country cooperation strategy and 5% to

operations support. In addition, there are country extrabudgetary resources (68%), regional office (18%) and headquarters (4%) (**Figure 10**, page 89).

Once the plan of action is entered into the WHO computerized activity system at the Regional Office, the system –due to its design- does not accept modifications with respect to expected results or products. Despite the plan allowing the introduction of additional activities if additional resources are mobilized, it does not allow the introduction of changes at higher level than activities. However, the experience in recent years is that work planned and work implemented in EPR vary considerably (SARS, pandemic influenza).

Figure 10. Estimated proportional resources for main events related to infectious diseases and epidemics, by source of funding and levels, with examples, WHO Myanmar
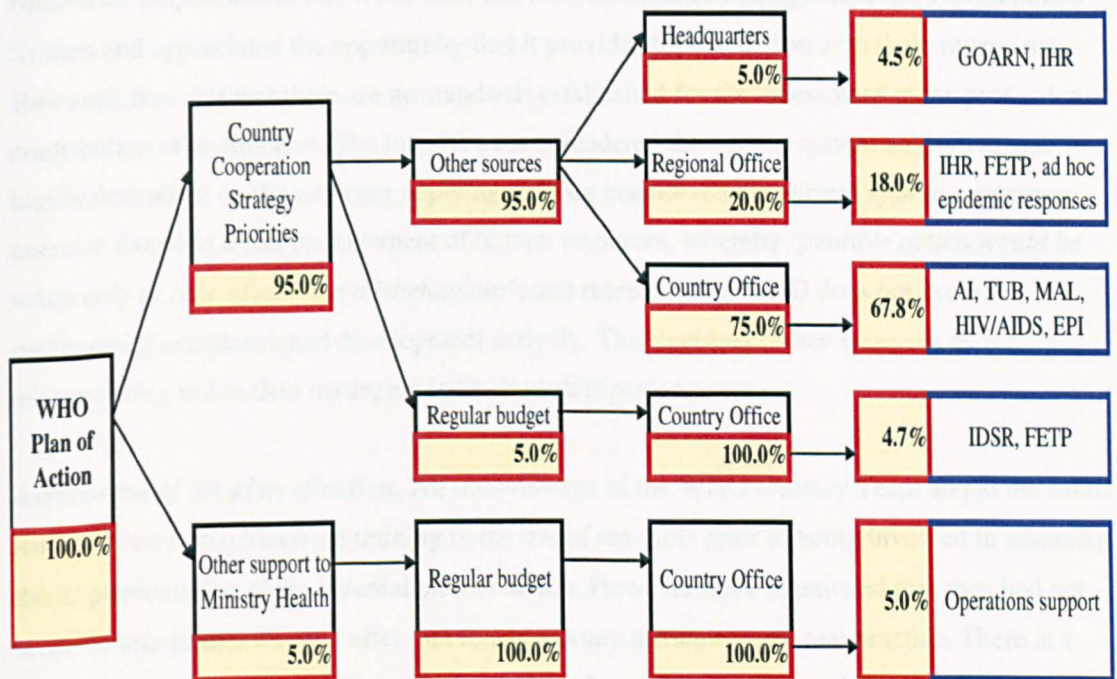
FETP= Field EpidemiologyTraining Program; AI= Avian/pandemic Influenza; TUB= tuberculosis control; MAL= malaria control; EPI= Expanded programme on immunization/Vaccine preventable diseases program.

4.4.3 Performance assessment

The research examined performance assessment from three different perspectives. These included the individuals, the plan of action, and the technical programmes (**Diagram 9**).

Diagram 9. Performance assessment, WHO Country Team, Myanmar
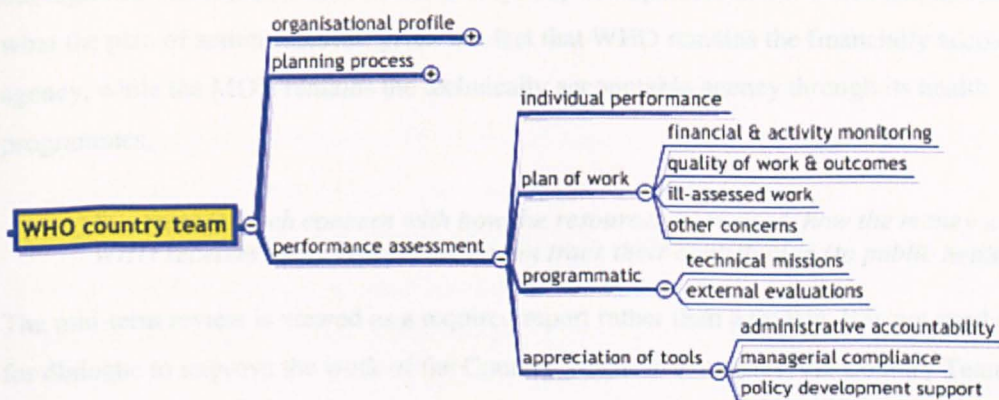
Individual performance. All WHO staff use the Performance Management and Development System and appreciated the opportunity that it provides for discussion with their supervisor. However, they felt that there are no standards established for the assessment of the professional contribution of technicians. The interviewees considered the current system subjective and highly dependent on the manager applying it. They considered the current system a routine exercise linked to a soft management of human resources, whereby *'punitive action would be taken only in case of extreme misbehaviour'*; and regretted that WHO does not promote professional excellence and development actively. The Regional Office was seen as administering rather than managing individual staff performance.

Assessment of the plan of action. All interviewees of the WHO Country Team and at the MOH had received initial hands-on training in the use of the tools prior to being involved in assessing the implementation of the biennial plan of action. However, they mentioned that they had not received any further training after that to address any difficulty with real practice. There is a six-month monitoring, a mid-term review (after 12 months), and the end-of-biennium report (24 months). A considerable number of activities are implemented by the MOH. Therefore, they are asked to fill in the forms and to assess progress prior to sending these to the focal points at the WHO Country Team for clearance. The staff at the MOH found the forms easy to work with because they "were familiar with the formats", and had no inconvenience in the absence of "unexpected" events. At the same time, they felt that the plan of action is pre-formatted and does not provide space to include critical information against which the plan should be evaluated.

WHO staff viewed the assessment of the plan of action as a way to monitor its implementation, but regretted that it meant little in terms of quality of implementation. There was an issue on what the plan of action assesses, given the fact that WHO remains the financially accountable agency, while the MOH remains the technically accountable agency through its health programmes.

> "... there is much concern with how the resources were used, how the money was spent... WHO receives many reports but do not track their contribution (to public health)" [1]

The mid-term review is viewed as a required report rather than a review. It is not used as a tool for dialogue to improve the work of the Country Team. In few cases, the Country Team receives feedback from the regional level related to the quality of the contribution. Therefore, it results in a self-assessment that, in some cases, is perceived as a threat.

WHO staff raised other issues in relation to how the plan of action is assessed at present. Firstly, they mentioned the high transaction costs. There are hundreds of contracts of Agreement of Performance of Work and managing each of them requires at least five clearances (two at the MOH, two to three payment instalments, and technical monitoring by WHO). The budget for some of these agreements is less than US$ 300. Secondly, staff considered that some aspects that are critical to the work of the Country Office are complex in nature and therefore are ill-defined in the plan of action. In particular, aspects related to leadership, dialogue fostering, mediation, and advocacy, are not attached to budgetary figure or assessed. For example, staff in the Country Office assessed the needs and helped prepare a proposal for establishing an isolation ward in a hospital in Yangon. This was done within the pandemic influenza preparedness plan whereby the donor funds the MOH directly. Subsequently, the donor and the MOH staff asked WHO to assist with the monitoring of the operations. However, there was no financial transaction from the donor or the MOH to WHO, or activity within the WHO plan of action to which the costs of these interventions could be charged. This critical function of WHO relates to what partners refer to as "being there". Nevertheless this "core presence" in the plan of action is not linked to EPR, although the type of assistance provided is.

Thirdly, mobilization of resources is another ill-assessed area in management terms. It could be approached through the additional resources that come in the health sector as a result of WHO mediation in some countries. However, in the context of Myanmar, there are few additional resources except for epidemic responses or for the Three Diseases. The fact that the country office receives additional resources could reflect the credibility of WHO among donors in a

context of strained relations between the external partners and the Government of Myanmar. These extrabudgetary resources, therefore, do not necessarily measure WHO performance in mobilizing resources locally.

Other programmatic assessment. The technical missions of the Regional Office staff look at the programmatic needs at country level. However, they do not analyse WHO performance necessarily. For example, in February 2007, a regional team visited Myanmar and assessed the national preparedness plan against pandemic influenza. However, as part of the visit, the regional team also assessed the technical and managerial capacities of the Country Team in the area of EPR, and recommended actions. This visit is part of the regional plan of action and, therefore, formally it is not reported as part of the country's plan of action.

Interviewees saw the external reviews of national programmes as the preferred option to assess performance. "Getting involved in external monitoring", "being able to identify the problems", or "being able to do something about", were the reasons that justified their preference. These reviews do not assess WHO performance directly, but useful to improve it[25]. These reviews also influence the national programme directions and the type of involvement of stakeholders[26].

Interviewees argued that external reviews of national programmes have public externalities because they contribute to refining the methodology used and the tools for further exercises in other countries[27]. In addition, they were seen as public goods because they uncover real situations allowing other countries to prepare to deal with major events.

Appreciation of tools and systems to assess performance. Figure 11, in page 93 shows the perceptions of WHO staff on the impact of the routine and ad-hoc performance assessment systems and tools. They considered that the routine tools used to assess individual and programmatic performance ensured administrative and managerial compliance. However, the interviewees saw their impact on improving country operations that lead to fostering policy development limited. **Table 11**, in page 93 provides details on the views that WHO staff had

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[25] Such as the national programmes on immunization or tuberculosis, reviewed periodically every two years; or the national programmes for malaria and HIV/AIDS, reviewed in 2005 and 2006, respectively. The national integrated disease surveillance system was assessed in 2003.
[26] For example, the external review of the malaria control programme served to change the country treatment protocol, and helped UNICEF to identify its plan of action, which started in 2006.
[27] For example, the review of the national malaria programme performed in Myanmar in 2005 will serve as an example for reviewing the national programmes of India, Nepal, Sri Lanka, and Thailand.

on the impact that the performance assessment systems and tools have on WHO at country (on staff, operations, plan of work) and regional levels; and on the policy and operations at the stakeholders (MOH, other partners) level. For example, the Activity Management System is not used to its full extent because of situational, user profile, or tool responsiveness reasons. Nevertheless, WHO staff noted that the System provides an appropriate framework for monitoring the implementation of the plan of action and the resources used.

Figure 11. Performance assessment mechanism, Opinions of WHO staff, Myanmar 2007

		Consumption	
		Internal	**External**
Timing	**Routine/ periodical**	Periodical review of biennial plan of action. Individual performance and management development.	Country annual reports (public advocacy). Periodical newsletters (country work, programme). Annual reports of global partnerships (e.g. tuberculosis)
		Bureaucratic requirement Accountability purposes Little feedback WHO/MOH Limited impact on staff or programme	*Newsletters, country annual reports: lack analysis. Limited impact on programmes.*
	Ad hoc	Technical missions to countries. Country performance audits. Operational audits.	Programmatic and global thematic evaluations. Global partnerships evaluation reports. Peer-reviewed material on national programmes. *Ad hoc* briefings (epidemic responses). Report to donor agencies on specific projects.
		Technical missions: Useful impact on operations. Audits: Few staff exposed, impact on operations.	*Program external evaluations: analytical, useful, changes suggested agreeable to MOH, impact on programme. Peer-reviewed material: useful, wider impact. Report to donors: needs situational analysis.*

Table 11. Impact of tools and systems to assess performance by area of influence, WHO and Myanmar. Opinions from WHO Country team, Myanmar 2007

Impact on Tools and systems	WHO				Myanmar			
	Country Office			Region	Ministry of Health		Other partners	
	Staff	Operations	Plan of Work	Program	Policy	Operations	Policy	Operations
Individual Performance Management	Fair	No	No	Limited	NA	NA	NA	NA
Office Tracking system	No	Financial accountability		No	No	No	No	No
Activity Management system	No	Financial accountability		No	No	Timely	No	If funded
6-monthy reporting of Plan of Work	No	Limited		No	No	monitoring $	No	No
Mid-term review (12 months)	No	If reprogramming needed		No	No	& activities	No	No
End-of-Biennium Assessment	No	No	Next POW	Reporting	No	Next POW	No	No
Regional Office technical visits	Yes if additional activities or $ needed			Yes	Yes	Possible	Possible	No
Headquarters technical visits	No	If Regional Office validates		Limited	Yes	Possible	Possible	No
Country technical experiences	No	Yes	Limited	Variable	Yes	Yes	Yes	Possible
Donor reporting	No	Yes	Yes	Limited	Yes	Yes	Yes	Possible
National Program External Review	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Country Office Evaluation	No	No	No	No	NA	NA	NA	NA
Programmatic Global Evaluation	No	Limited	No	No	No	No	No	No
Audit	If exposed	Yes	No	No	NA	NA	NA	NA

No = none or very limited impact of the tools & systems; Yes = considerable impact; NA= not applicable

4.5 Main issues

The interviewees attached importance and significance to those emergent infectious hazards with a risk of international spread, which relied on mitigation strategies in the absence of effective control strategies (SARS, pandemic influenza). They also gave importance to those events for which control strategies exist but have high disease burden (malaria, HIV/AIDS, tuberculosis, diarrhoeal diseases), and to those infectious diseases with high epidemic potential for which the real situation was unknown (dengue, measles, leptospirosis, extensively drug-resistant tuberculosis).

The interviewees alluded to contextual factors challenging the epidemic responses that concurred with what had been reported elsewhere (Kyawt-Kyawt-Swe 2004). They also referred to failure of ongoing programmes as precipitants of the events of significant public health importance. Access to incomplete population figures and the limited MOH public disclosure on situations to avoid criticism of the government challenged the stakeholders' action as well.

The interviewees alluded to factors conducive to addressing the events. These included having a structured programme on disease surveillance; and having hard-working and highly motivated health staff despite their day-to-day difficulties. In addition, they mentioned the political will and authority from the government to address the events, also reported by others (Stover, Suwanvanichkij et al. 2007; Wibowo 2007);

Stakeholder relations played an important role because of the special situation of Myanmar (Adaeze 2005). On the one hand, there is the position of the international community towards the current regime (Beloe 2005; Parry 2005; Ahmad 2006). It calls for further scrutiny of international assistance to exclude the central government from its benefit (Green and Mitchell 2007; Steinberg 2007; Stover, Suwanvanichkij et al. 2007). On the other hand, there is the international concern of not assisting Myanmar in addressing the potential for infectious diseases events to spread internationally (Beyrer, Suwanvanichkij et al. 2006; The-Rockefeller-Foundation 2007). The relationships among the stakeholders reflect the difficult environment in which stakeholders work, and which results in criticism and lack of appreciation of and/or failure to accept their respective mandates. Adaeze, looking at several development agencies in Myanmar, found similar strained relations (Adaeze 2005). In the present study, stakeholders get

involved and respond to major events of infectious diseases despite their position with respect to the government. This is partially due to the relative openness of the MOH when compared to other sectors, and to the concerns with global security about infectious diseases, that influenced the softening of the international assistance conditioning as well.

The health sector is more accepting to national and international stakeholders working together than other sectors, in which the government approach to dealing with external support challenges the contribution from these partners. For example, with respect to the response to the tsunami in December 2004, the mid-term review of the United Nations flash appeal noted "a lack of disaster preparedness" and further revealed "the inherent complications linked to coordination between international partners and national authorities" (UNDP 2005).

From a programmatic perspective the stakeholders had different views on the main components and achievements of the current national programmes to address the major events. On the one hand, the national stakeholders, including national NGOs and the MOH, saw surveillance, capacity-building, and disease control plans as the most important components of the current system. They also mentioned political commitment. However, they thought that controlling infectious diseases was the most salient success of the programme and did not mention capacity-building as a salient success. On the other hand, the international stakeholders, including WHO and other partners, thought that response and readiness, surveillance, and specific disease programmes were the most important components. They thought that the most salient programmatic successes were the response to the outbreaks and national capacity-building. These differences could reflect the higher turn over of staff among international stakeholders and their ad-hoc collaboration with their national counterparts.

There were three broad categories of what "results" in addressing the major events meant to the interviewees. Firstly, "result" meant a health outcome, expressed directly as the reduction of morbidity or mortality, or indirectly as "taking the problem away". Secondly, "results" was defined in terms of what Rogers defines as a complicated process composed of multiple necessary-but-not-sufficient conditions (Rogers 2008); for example, coordination among partners, or complying with international standards. Thirdly, "results" was defined in terms of a complex process (Rogers 2008), whereby conditions emerge. This includes government legitimacy (Lai, Lentz et al. 2004; Upshur 2005; UN 2006), changing of attitudes towards general practitioners, or other positive externalities generated through epidemic responses.

"Failure" to address the situation related to the absence of health outcomes, due to situational factors and deficient interventions. "Failure" was seen as a learning process through which deficiencies served as the basis for addressing future events. However, these lessons and the causes were not reported openly. Therefore the opportunity to produce public goods was lost.

WHO contribution did not relate to "results" when these were understood as health outcomes. Rather, WHO contribution referred to complicated processes ensuring quality interventions by providing technical assistance and leadership, fostering coordinated responses to events, and supporting routine operations. WHO contribution was seen as part of a complex process through its core presence in the country as well. This contribution related to concepts that are difficult to quantify, such as fostering dialogue or trust from the counterpart. This corresponds to the "being there" that most interviewees valued much, and that some stakeholders criticized, considering that WHO is too near to the Government.

The tools used routinely to assess WHO performance in the area of EPR do not record the above critical aspects of the work of WHO in Myanmar and lack flexibility. The tools used at present report on what had been planned, but not on what was implemented at the end of the biennium. Another limitation is that assessment of the performance is linked to budgetary resources, and not to the results at the users' level. For example, technical visits from regional advisers were not attached to Myanmar's plan of action, but to the Regional Office's plans.

Therefore, at present it is not possible to assess the organizational performance of WHO comprehensively. Moreover, the tools currently used do not capture the contribution linked to the core presence described above. For example, the final assessment of the 2004-2005 plan of action reports on the implementation of activities. However, there is no indication of how the implementation of this plan contributes to the results in (national) programmatic terms or with respect to the major events[28]. The report does not include any lesson learnt from the in-depth analysis of the difficulties or failures experienced. Hence, there is no formal account of the challenges that the WHO Country Team or the MOH face when preparing for, or responding to, epidemics.

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[28] Either because there is no formal linkage or because the information to allow the analysis is not collected.

The individual performance of staff uses the management by the theory of objectives (Dransfield 2000). It relies on six elements[29] focused in key result areas that need to be matched against standards. The appraisal, therefore, should address how the individual enables the Organization to achieve its planned results. In the case where the criteria to determine what is strong performance versus weak performance are not clear to all concerned, the assessment will lack objectivity and will tend to be subjective. This will result in unclear direction for future development (Dransfield 2000). However, in practice, assessing how individuals enable the achievement of planned results was difficult because WHO plans were not disaggregated by function to the process level to which they contributed.

Two broad evaluative exercises (WHO 2003; WHO 2004) looked, among others, at programmatic aspects of WHO support to EPR in Myanmar. The country evaluation of 2004 had looked into the capacity of the WHO Country Team and had recommended recruiting an epidemiologist. However, the epidemiologist post was established only when the extrabudgetary resources became available for pandemic influenza preparedness in 2007.

The emphasis that the administrators and the technicians placed on performance assessment differed, and at times, it was difficult to reconcile. On the one hand, the administration at the Regional Office emphasizes the need to spend the resources at country level in a timely manner, to avoid obliging the country to return them to the Region or headquarters. This reflects the importance of financial accountability. On the other hand, what matters most for the technical programmes is quality assurance. Technicians feel that the administrators of the Regional Office should trust them more because the liquidation of funds is cumbersome, and because it is important to keep some funding to bridge the gaps in the current uncertainty relating to donors.

Currently, there is a disconnection between the tools to measure performance in EPR. **Figure 12**, in page 98 illustrates the opinion of WHO staff on the focus and the impact of the various assessment tools used to measure performance in EPR (although not exclusively). On the one hand, there are the tools needed for accountability purposes. On the other, there are the tools to assess WHO contribution to national policy development that do not need to focus only on WHO plans, but rather on the national programme that WHO aims at contributing to (also

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[29] These six elements are a statement outlining organizational objectives; statement of its objectives; individual objectives linked to organizational objectives; regular performance reviews throughout the year; performance-related pay/step increase; and training and counselling.

referred to in **Table 11**, page 93). While both tools are necessary, there is also need to establish the linkages among them to approach the analysis of assistance effectiveness. Other programmes, such as tuberculosis or the vaccine-preventable diseases have developed linkages among both sets of tools and use them successfully.

Figure 12. Focus and main domain of impact of the tools and systems used to assess performance, perceptions WHO country and MOH, Myanmar 2007
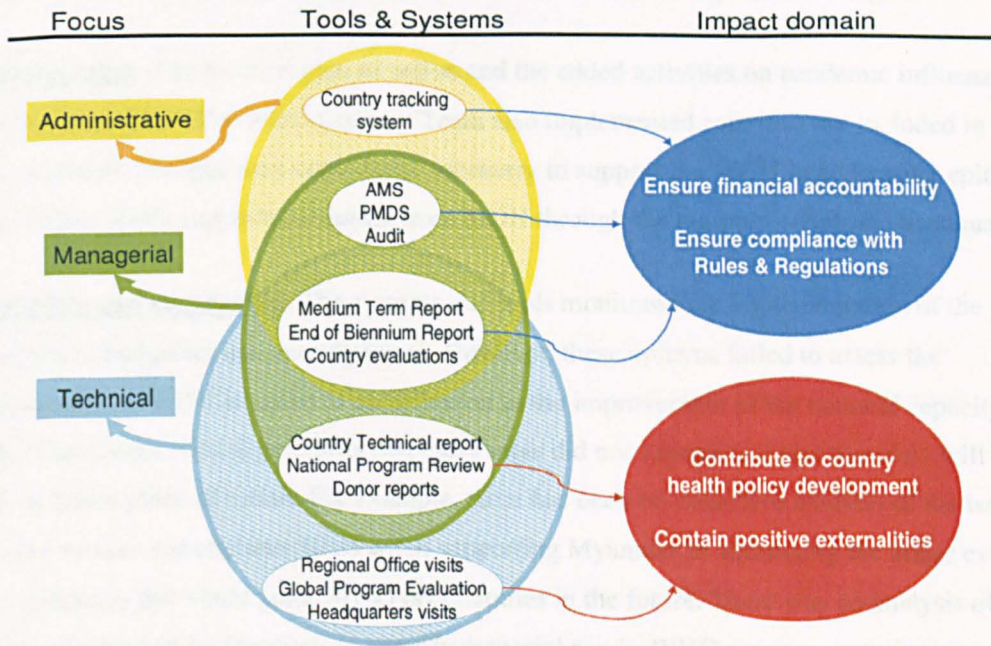
AMS= Activity Management System; PMDS= (individual) Performance Management & Development System

The above challenges result in WHO country support to EPR not conforming fully to the assumptions of the model from the perspective of results-based management (Figure 4, in Chapter 3 page 43):

Planning. The planning process allows a proper identification of needs in EPR in Myanmar. While the process is asymmetric towards the MOH for a proportion of the WHO regular budget, this represents less than 5% of the total investment of WHO support to addressing major events and epidemics. Due to the specific country conditions, the inclusiveness of partners is limited and the coordination with partners delicate.

Organising. The plan of action is agreed and resources are made available timely. However, the plan of action does not foresee any resource should there be a need for epidemic response.

In the period considered by the research, these additionally-needed resources have been provided in a timely manner through other levels of WHO or through donors locally, and there have been few activities cancelled because of a lack of funding. Nevertheless, there are conditions that are not conducive to improving EPR, such as the absence of information disaggregated at the appropriate level to guide decisions, or broader political factors affecting programme delivery. This includes having most of the partners in Yangon while the MOH is in Nay Pyi Daw, or obtaining timely security clearance for travelling outside Yangon.

Implementing. The biennial plan of action and the added activities on pandemic influenza were implemented. The WHO Country Team also implemented activities not included in the plan of action, but that were considered necessary to support the MOH in addressing epidemics. In addition, WHO supported requests from MOH through the regional office and headquarters.

Reporting and monitoring. The systems and tools monitored the implementation of the plan of action in budgetary and activity terms. However, these systems failed to assess the performance of WHO in terms of contribution to the improvement of the national capacity in EPR. There were critical processes that these tools did not capture and that therefore will not inform future plans of action. For example, there has been no collective analysis of the issues that the various stakeholders faced when supporting Myanmar in addressing the major events and epidemics that could guide WHO programmes in the future. There was no analysis of the WHO contribution by functions to identify potential needs. WHO country operations are guided by the availability of resources and by the needs rather than by results.

5 Nepal Case Study

This chapter follows a structure similar to that of the Myanmar case study. However, both structures are not identical, and they reflect the different contexts and views from the stakeholders interviewed. Annex 16 in page 209 provides more detailed information about the country. Annex 17 in page 213 portrays the clustering of information gathered during interviews into three core themes that guides the presentation of findings.

5.1 Background

Country

Nepal has a population of 27 million inhabitants, of whom 31% live below the poverty line. Nepal is the poorest country in South Asia and the 12th poorest in the world. Ten years of conflict ended in November 2006 (WHO-Nepal 2007). Nepal restored its Parliament and democracy in April 2007.

Under the new Government, the Ministry of Health and Population[30] (MOH) declared health a fundamental human right of the Nepali people. It developed a three-year interim plan to "improve the health status of all the Nepalese population with provision of equal opportunity for quality health care services...". The Government started providing free health services to the poor, socially disadvantaged, women and indigenous people, and plans to expand these by promoting corporate social responsibility of the private sector.

More than 10 major international development partners contribute to 40% of the public health expenditure in Nepal through the "External Development Partners" (UN 2008). These include agencies that have signed a Statement of Intent to cooperate in a sector-wide approach. The MOH chairs the Health Sector Development Partners Forum, a mechanism for stakeholder collaboration. Moreover, at the Joint Annual Review, the partners review the performance of the sector during the previous year, and agree on the forthcoming year's work plan and budget.

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[30] This document refers to the Ministry of Health and Population as MOH, generic term for Ministry of Health.

Nepal is also part of the International Health Partnership[31] (DFID 2008). In addition, the Emergency Health and Nutrition Working Group works with the MOH and the Ministry of Home Affairs to respond to any health and nutritional emergency through coordinated national and international support.

Addressing infectious diseases

The Early Warning and Reporting System started in the year 1999 and ran actively until 2003 (Pyle, Nath et al. 2004). At present, there are 17 facilities reporting under this schema throughout Nepal, although their weekly reports have become erratic. In addition, the Heath Management Information System ensures the routine collection of data with monthly reporting. The Central Epidemiology Unit and WHO carried out a study on the performance of the national system on communicable diseases surveillance and response in July 2007. The results of this study identified the gaps and bottlenecks of the current system and recommended improvements[32] (WHO 2008).

The MOH, through the Epidemiology and Disease Control Division, deals with most of the major events relevant to this research[33]. Several of the major events that the interviewees put forward are addressed through national programmes (Table 21 in Annex 16, page 212). These programmes are well established and well resourced, and are governed through inter-agency/multi-stakeholder country coordination mechanisms. Other events are dealt with through ad-hoc epidemic or "crisis" committees.

Nepal is a member of the South East Asia Association for Regional Cooperation. This Association is involved in addressing specific infectious diseases, through its center in Nepal for the monitoring of resurgence of tuberculosis (DaSilva and Iaccarino 1999).

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[31] This partnership, established in September 2007, aims to make aid more effective by getting donors to work together to meet the health priorities in seven selected countries.
[32] Results presented at a national workshop in October 2007, Kathmandu. These included the need for training in post-disaster surveillance and needs-assessment among health staff; and increasing of prevention and control measures against malaria in outbreak-prone areas.
[33] Including surveillance and response, disaster preparedness and response, disease control (except for those under the programme on Vaccine-Preventable Diseases), zoonotic diseases, malaria, visceral leishmaniasis, human (avian) influenza, and others. The national plan on Dengue and the preparedness plan to address human (avian) influenza started in 2006, although they are not functional. A national plan on antimicrobial resistance started in 1999, although the extent of the antimicrobial resistance problem is unknown.

The following sections present the data generated in Nepal around three themes: events, results, and the WHO Country Team. Each of these themes then deal with the issues that arose from the interviews. Each section includes a diagram to present its content and to facilitate reading. **Diagram 10** of page 102 introduces the composition of the sections.

Diagram 10. Selected core themes and issues, Nepal

5.2 *Major events related to infectious diseases and epidemics, and context*

The themes around the "major events or epidemics" related to infectious disease in Nepal since January 2004 include (Diagram **11**):

- Importance and significance
- Country context
- Stakeholders

Diagram 11. Importance and significance aspects related to the major events of infectious diseases and epidemics in Nepal since January 2004
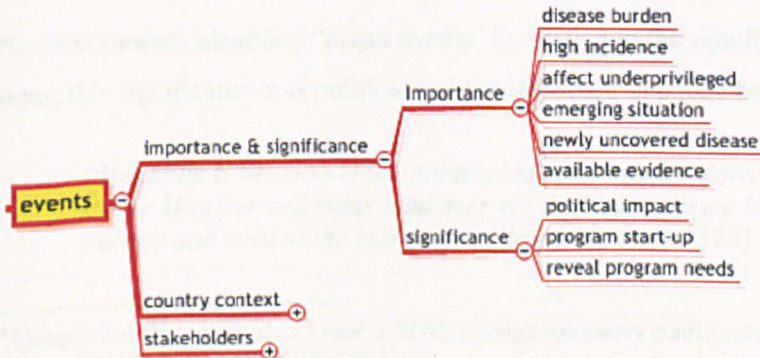
5.2.1 Importance and significance

Some interviewees differentiated between the significance and the importance attached to the events. They considered events major because they were important in public health terms because of their disease burden, expressed in incidence or case fatality, such as cholera or malaria. Often the importance of the events related to them being recurrent problems that are "accepted" despite their magnitude (diarrhoeal diseases and acute respiratory infections). There was importance attached to events and the notion of social justice, whereby the most deprived are the worst affected:

> *"In the remote hill areas and in the terai there is a lack of water and health education. Many cases of diarrhoea and many people die... many children do not go to school... Government messages do not reach this part of the country. There is no electricity. Things are on a plate with food... hygiene practice does not exist." [14]*

Importance was attached to the emergence of diseases that were affecting non-immune populations, or to the inappropriateness of the current structures to deal with the problem:

> *"The malaria outbreak happened after the monsoon. Outside the season. There was a resurgence of falciparum malaria in the region in populations not immune" [28]*

> *"Dengue fever was diagnosed for the first time and is complete new challenge for Nepal[34]... What has come out is the awareness of the municipalities. They were not considered as part of the system. But with this happening in urban structures and having all risks in urban areas, this has come to the limelight." [28]*

Importance was attached to the lack of evidence in relation with quality disease surveillance and the use of appropriate case definition, and to laboratory confirmation:

> *"Before we spoke about Japanese Encephalitis, but now we also think of other arbovirosis... I am sure that there must be West Nile encephalitis virus. One expatriate went to Thailand and was diagnosed there. Perhaps Nipah virus or Hanta virus. They are all there but we cannot diagnose fully. Magnitude of the disease not known." [10]*

The interviewees identified "major events" in relation to the significance that these had. At times, this significance was political and not important in public health terms:

> *"Hepatitis E because of the political attention that it drove. Water quality is bad. The Prime Minister and many ministers got ill... It is an issue in the rural areas but also in the city and even at the home of the Prime Minister." [28]*

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[34] Dengue was first reported in Nepal in 2005, through laboratory confirmation of serum samples studied from January 2004 to June 2005 (WHO 2005).

Other times events related to infectious diseases were considered significant because of the programmatic action that they originated:

> "The review of the national **tuberculosis** control programme was a significant event. Done after seven years, it had very good remarks to improve it." [19]

> "**pandemic influenza** preparedness program is ongoing but up to now we see no evidence on it." [21]

Or the action that would be needed to tackle a potentially major event properly:

> "They use too many antibiotics. This is a huge problem. Emerging **antimicrobial resistance** will be a problem unless the Government comes with a policy to use drugs rationally." [26]

5.2.2 Country context

There were three categories of contextual factors challenging the addressing of the major events and epidemics (Diagram **12**).

Diagram 12. Country context and major events, Nepal
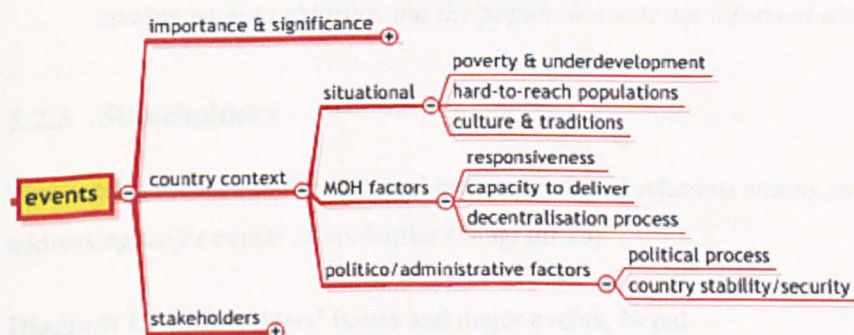
The first category includes several situational factors related to communities living in hard-to-reach areas, having limited resources, and facing culture and traditions:

> "When somebody is ill, they think that this is a deadly disease ... they are afraid and go to the forest. We are there, mothers are there, and education is there. But when the person is ill, then they go to forest." [26]

The second category includes factors related to how the MOH deals with the major events or epidemics in the day-to-day reality. Interviewees recognized that the government has become increasingly responsive in the area of epidemic response. However, the dominant view

expressed concern over the availability of qualified staff and their capacity to organise and manage a national EPR programme at the central level of the MOH:

> *"In EPR the Government has no program, budget, or person responsible at present. The unit at MOH has an asterisk that means 'not yet implemented'. Without focal person, implementation is difficult." [12]*

Interviewees expressed similar concerns about the real capacity of the public health system to deal with major events within the current decentralization process:

> *"Every district has a Rapid Response Teams. In most cases there is no people there, only paper… They do not have the resources. They just go and treat but the epidemiological part is missing." [26]*

The third category includes broad politico-administrative issues, such as the peace agreements, that interviewees considered positive. At the same time, their views expressed concerns about the transitional and fragile political process that affect their public health work. Some interviewees considered that the overall stability of the country had an impact on public health and in its capacity to respond to epidemics:

> *"During the political unrest in Kathmandu, there were several deaths of cholera because the chlorine supply could not come into the valley and the drinking water was coming without chlorine, but the population was not informed about this problem." [22]*

5.2.3 Stakeholders

This section focuses on the partners' environment and relations among stakeholders related to addressing major events or epidemics (Diagram **13**).

Diagram 13. Stakeholders' issues and major events, Nepal
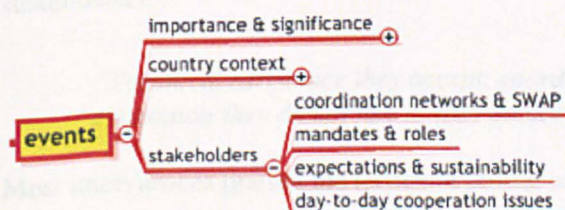
Firstly, the interviewees expressed themselves as being part of a dynamic network that tackled issues related to aid effectiveness where the Government and support to the National Plan is at the centre of the discussions:

"We should be only supporting the national plan... All what we do is in the red book, the Government allocations that the Government has agreed to do. Our review should be the review of their work plan. We should end the agencies' reviews." [13]

The interviewees had an overall appreciation of their collaborative relations. However, they referred to the substitution effect that the international partners have vis-à-vis the MOH duties. The MOH was perceived as being pragmatic to the point of lacking its duties, or letting other parties do what it could assume:

"Having external partners have negative impact also. With so many NGOs, then the Government is paralysed. If external partners do, then the nationals will not do." [2]

The international stakeholders justified their interventions through partners other than MOH at central level as a transitory measure to "get things done" in an environment where programmes do not function because of lack of human resources:

"Because Government systems are very slow. Partners become upset because they want to be within their timeline... Then they do their things and get the things done." [25]

"It is no good to develop a parallel system...We are here and we support it (programmatic delivery through external organizations) to save lives. Our intention is to have these programmes running and supported by public institutions." [19]

Some interviewees considered that NGOs were unable to address EPR needs in the long term, thus, provoking criticism of focusing on limited or non-sustainable issues:

"But they do not go out finding what the water quality is. They do not investigate what happens to the water. Or health promotion. They keep finding cases but they do not do anything on the prevention side." [22]

There were issues in relation to the openness of the government and exposure to scrutiny of the stakeholders.

"Technical assistance they accept, coordination they accept, but monitoring and evaluation they do not like it, they do not accept." [15]

Most interviewees praised the technical profile of WHO. However, some criticised its lack of transparency and others were frustrated at times, because of its perceived mandate as working only for the Government, and being bureaucratic.

"I would like to see WHO taking more leadership in human resources. This is the most important area impacting health outputs in this country... I do not think that WHO

should continue training the existing staff, but looking at what the needs are, the incentives, the 'transfer terrorism' of staff to rural areas." [13]

"When it is money and funding WHO is the least transparent. When WHO gives duty travel, 'We have direct relationship with MOH and this is our business' they say." [19]

5.3 *Meaning of results and WHO contribution*

This section covers two themes. The first theme deals with the meaning of "results" (Diagram 14, page 107), and approaches it from three perspectives: programmatic, addressing specific events, and "non-achieved result".

The second theme deals with WHO contribution towards these "results". Contribution is looked at in terms of WHO core functions, its presence, other support, and on "what would happen if WHO were not in Nepal" (**Diagram 15**, page 111).

Diagram 14. Aspects related to the meaning of results, major events, Nepal
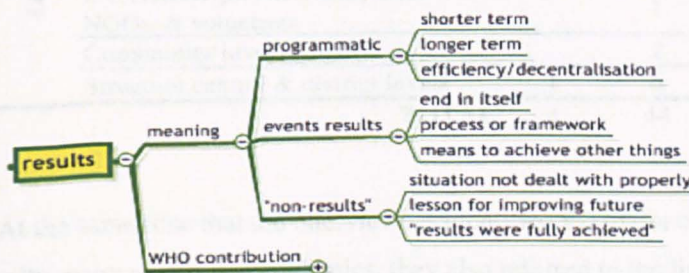
5.3.1 Meaning of results

Programmatic terms. Nineteen interviewees responded to questions on the main components and achievements of the programmes and systems to address major events and epidemics in Nepal. Outbreak response and having a structure at central and district levels came out as being important to all stakeholders' groupings. However, surveillance, including laboratory services came across as being the most important component. Nevertheless, the predominant view was that the current surveillance programme lacks robustness, despite the importance that stakeholders attach to it:

"Surveillance programme is very weak... This programme is a priority... However, there are so many priorities in this country. We had just the mid-term review of the health sector and the surveillance did not come out as one of their priorities. Priority

was to scale up the public health interventions to reduce mortality... Infectious disease surveillance will become important and will be improved because of pandemic influenza." [17]

Table 12. Main components in the current system to fight against major events of infectious diseases and epidemics, perceptions of stakeholders, Nepal 2007

| Time | Main components in the current system | Stakeholders | | | | TOTAL (N=19) |
| | | National | | International | | |
		NGOs (n=1)	MOH (n=8)	WHO (n=4)	Other (n=6)	
Shorter	Outbreak verification		3	1		4
	Outbreak response	1	6	2	3	12
	Risk communication	1	2	1		4
	Rapid Response Teams		4	1	2	7
	Preparedness plan			1	1	2
	Contingency planning/stocks		3	3		6
	Crisis/ intersectoral committees	1	2		3	6
Longer	Surveillance (including laboratory)		8	4	4	16
	Control plans/ technical guidelines		2			2
	National capacity building		3	2	1	6
	Disease control & prevention		2			2
	Involvement private sector, local NGOs, & volunteers		1		1	2
	Community involvement		2		1	3
	Structure central & district levels	1	6	2	1	10
	TOTAL	4	44	17	17	82

At the same time that the interviewees identified the major components of the system to deal with major events and epidemics, they also referred to the limited functionality of its services in the midst of the decentralization process and lack of qualified staff.

Despite the challenges, the interviewees recognized some significant progress with respect to some of the components of the system. The interviewees from the MOH mentioned more achievements in the long run than the other stakeholders did. In particular, they mentioned the improvement of surveillance systems, control and prevention of diseases, and progress in the policy process and community involvement. International partners other than WHO, and the national NGOs interviewed put forward more achievements in the short run, notably in the outbreak response, training of Rapid Response Teams, preparedness plans, and coordination mechanisms. All stakeholders commented on the relative nature of these achievements and saw progress as an ongoing process (Table 13).

Table 13. Main achievements of the current system for epidemic preparedness and response (EPR), perceptions of stakeholders, Nepal 2007

Time	Main achievements Components of the current system to fight epidemics	Specific elements	National NGOs (n=1)	MOH (n=8)	International WHO (n=4)	Other (n=6)	TOTAL (N=19)
Shorter	Outbreak verification	Mechanism & software developed		5	1		6
	Outbreak response	Coordinated response	1	3	1	3	8
		Outbreak controlled	1	2	1		4
		Data analysed & reports made		3			3
	Risk communication	Info sharing, health education		2			2
	Rapid Response Teams (RRTs)	RRTs trained	1	4	1	1	7
	Preparedness plan	Resources mobilised	1	1		1	3
		Contingency stocks constituted		1	1	1	3
	Coordination mechanism	Crisis committees established	1	2		1	4
Longer	Surveillance	Laboratory services improved		3	1	1	5
		Surveillance strengthened		6	1	1	8
	Control/Surveillance plans	Plans evaluated/strengthened	1	1	1		3
	National capacity	Long term training of staff	1	4	1		6
	Disease control & prevention	Lower disease incidence	1	3			4
		Disease mortality reduced		3			3
	Community involvement	Awareness public enhanced		2			2
	Governance/ leadership	Teams at central & district levels		3	1	1	5
	Policy process	Decentralisation to districts		4			4
		TOTAL	8	52	10	10	80

Results in addressing major events or epidemics since 2004. The views of what constituted "results" to the interviewees fell under three broad categories:

"Results" as a health outcome/ end in itself. This represented "results" as controlling the situation or illustrated a situation that was dealt with comprehensively:

> *"…(cholera) patients were treated. We also did health education and door to door, spread messages, and brought the situation under control quite satisfactory." [16]*

For other interviewees "results" was the expression of decrease in the incidence of cases and in case fatality, or the avoidance of panic among the general public. There was a sense of temporality in the majority of the views about "results", either because of the timeliness of the response (malaria) or its transient effect (addressing cholera only through treatment).

"Results" as part of a process or framework. Interviewees referred to "results" in terms of adherence to quality standards, either because programmatic targets were achieved (e.g. immunization against Japanese Encephalitis), or because addressing these events was well

coordinated, including sharing of plans and development of guidelines and other material (pandemic influenza); and documenting the outbreaks when these happened (dengue).

"Results" as a means to achieve other things. Firstly, "results" was the expression of what constitutes governance of the MOH, thus providing legitimacy when it fulfils its mandate:

> *"Everybody was impressed by the Government. It was the first time that the Government sent the Rapid Response Teams and responded to outbreaks and various infectious diseases." [13]*

Secondly, "results" illustrated added positive externalities:

> *"We used the (cholera) outbreak to enhance our capacity...We acquired mobile labs and then we tested them... We also introduced syndromic disease reporting." [21]*

> *"Now they emphasize preparedness (for dengue). They are training trainers. They are developing operational guidelines... and upgrading the laboratory services." [23]*

Lastly, results expressed the uncovering of an emerging situation:

> *"We thought that A.aegypti was not present in Nepal. However, we sent entomologists and found that this mosquito is present in Nepal together with the A.albopictus (thus the risk for dengue)." [7]*

What had not been achieved in the response to the major events. The interviewees' expression of non-achievement of results was twofold. Firstly, the non-achievement of results related to having a situation whose real cause remains un-tackled. This can be due to several reasons, including broader country socio-economic development that prevents the health sector addressing epidemics in the long term. Other times, "failure" was associated with an overwhelming situation for the stakeholders that originated from the decentralization of the health system, and/or their interventions:

> *"The local level would need to respond to the situation. They need to be organized but are overwhelmed. They never help these structures to get ready for the next time." [22]*

> *"We do not know what happened for 3-4 months from WHO...The Government needs so many clearances and permits... Financial arrangements are not so easy... Now we have the money already in our account...So, now our next problem is that we do not have a team... This is very difficult for us." [10]*

For some interviewees it meant having interventions that lacked quality because it was not holistic (e.g. cholera only treating patients), or not sufficiently inclusive (private sector).

Secondly, non-achievement of results constituted an option for improving future situations:

"We respond to outbreaks, but nobody is doing a proper outbreak investigation... Now we have a baseline of the surveillance system performance. This a good start. Still so many things to do." [10]

Out of the 19 interviewees that responded to this question, 3 interviewees referred to the response to acute gastroenteritis and considered that all had been achieved and that therefore, next time, a response similar to the current one would be satisfactory.

5.3.2 WHO contribution to results

The WHO contribution towards addressing the major events was analysed against its six core functions (WHO 2006) at country level and against other support that the interviewees considered important (Diagram **15**).

Diagram 15. WHO contribution to results, major events, Nepal
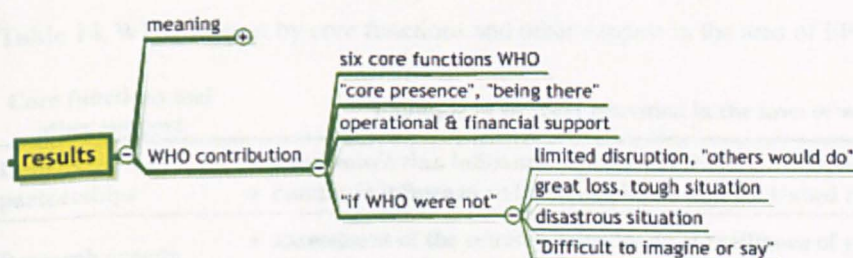
There were 203 comments on the WHO contribution to addressing major events, from 19 interviewees (Annex 18, page 214). Among the six core functions in countries, the interviewees identified technical assistance and capacity-building, and health leadership and partnership development, as those contributing most to addressing the major events. The interviewees mentioned WHO contribution in technical assistance along with the provision of financial or logistic support in most of the cases. In particular, they mentioned WHO logistic support together with financial assistance and the provision of equipment and supplies as an important contribution.

When mentioning the main WHO contributions, the stakeholders referred to WHO presence and how WHO works with the MOH. Often, it was referred to as "always being there" not only for the MOH, but also for other partners.

The interviewees referred to WHO contribution to the national capacity-building in two ways. Firstly, they mentioned the importance of WHO in building capacity either through working together in relation to the technical assistance provided, and the training of Rapid Response Teams. Capacity-building was responsive to the country's felt need and the views were positive. Nevertheless, the interviews showed concerns over the impact of training in relation to needs.

"The input in training from WHO and MOH is very little. These are the results from the operational research on Integrated Disease Surveillance and Response System. The people trained already moved. The people trained is not enough." [4]

Secondly, several interviewees among the international stakeholders expressed concern in relation to the selection procedures.

"They (WHO) should be able to stress strict selection criteria... There is no excuse to say that the MOH has the autonomy to decide on the participants." [21]

Table 14. WHO support by core functions and other support in the area of EPR, Nepal 2006-2007

Core functions and other support	Example of support provided in the area of work EPR
Leadership and partnerships	• **Pandemic/Avian influenza**: with World Bank, USAID, AusAid. • **Pandemic influenza** and the role played with the United Nations Country team.
Research agenda	• **Assessment of the country capacity on surveillance of priority diseases** as the pillar to strengthen a national (decentralized) system.
Norms and standards	• IHR: Technical assistance, assessment of core capacities, priority development plan, translation of text, launching of IHR.
Evidence-based policy formulation	• **Groundwork to develop an Integrated Disease Surveillance** to reduce impact of priority infectious diseases.
Technical assistance /capacity-building	• **Development of a network of Rapid Response Teams.** • **Development of a network of journalists trained on communication in public health emergencies/epidemics.** • **National capacity built on outbreak management.** • **Software developed on infectious diseases events/outbreak investigation and staff trained in its use.** • **Development of a plan to prepare for and respond to Pandemic Influenza,** including table top exercises, intersectoral coordination, development/adaptation of guidelines, and identification of laboratory network. • Capacitation of a core group to prepare for **implementation of IHR(2005).**
Other Support provided	• *Ad hoc* support to requests from country stakeholders (NGOs, bilaterals, other). • **Support to routine activities** (reagents to National Public Health Laboratory). • **Provision of supplies** (contingency stock of Tamiflu)

Source: Discussion with EPR leader, WHO Country Office Nepal, October 2007

To the opinion of the interviewees, WHO had contributed relatively little to developing evidence-based policies in the area of EPR or to analysing health information and trends.

The stakeholders, in particular the MOH, saw WHO as part of the MOH system, not only because there is a day-to-day working relationship with WHO staff sitting at the MOH, but also because WHO is responsive to its immediate needs.

While the interviewees identified the contribution of WHO, their views on its impact were less definite. This was partly due to "WHO working towards contributing to the national programme" instead of having its own projects. WHO was seen as "bringing experiences from other countries and providing the best practice reference for the consideration of the MOH ".

The value placed in WHO was approached through the question on "what would happen if WHO were not in Nepal" to which 20 interviewees replied. Table 15 in page 114 shows their replies grouped by stakeholder and by the four scenarios identified. Table 16 in page 114 further elaborates on the elements that would be affected by stakeholder group:

- **There would be disruption and other stakeholders would need to come in.** The reasons behind this position would be a lesser MOH service delivery capacity, less efficient epidemic responses, and fewer resources for routine work. Some interviewees did not see WHO absence as necessarily negative in the long run, since this would force the MOH to take over, since having external partners could paralyse the Government.

- **There would be a great loss and the situation would be tough.** In addition to the above, there would be less capacity-building and the main MOH partner would disappear. This would entail having less access to accurate information and to a permanent counterpart, in particular for MOH and for some international partners.

- **The situation would become disastrous.** The MOH would have lesser service delivery capacity due to fewer resources available for epidemic response and for routine activities. There would be less technical assistance and less operational research capability that would result in health policies with lesser evidence basis.

- **It is difficult to imagine such a situation.** The interviewees share elements as in other groups, except for the lack of guidelines/quality standards. But they "could not foresee what would happen". There were long silences with ambivalence between other groups.

Table 15. Different scenarios that Nepal would face in addressing major events in case that WHO were not in Nepal, perceptions of stakeholders (N=20), Nepal 2007

	National NGO	Ministry of Health	WHO	Other external partners	TOTAL
Disruption, but others would do	1	3	-	1	5
Great loss, tough situation	-	3	-	3	6
Disastrous situation	-	2	1	1	4
"Difficult to imagine or say"	-	2	2	1	5
TOTAL	1	10	3	6	20

Table 16. Perceptions on the elements that would be affected if WHO were not in Nepal, by scenario and stakeholder category, Nepal 2007

	Disruption, others would do	Great loss, tough situation	Disastrous situation	"Difficult to imagine or say"	TOTAL
MOH service delivery capacity	1NAT	1MOH, 2INT	2MOH, 1WHO, 1INT	1MOH, 1WHO	10
Partnerships and coordination	1NAT	2INT		1MOH, 1WHO	5
Others would need to come in	1NAT, 1MOH, 1INT			1WHO	4
Technical assistance	2MOH	1MOH, 1INT	2MOH	1MOH, 1WHO, 1INT	9
WHO presence, "always there"		2INT	1MOH	1INT, 1WHO	5
Epidemic response delayed/limited	1NAT, 1MOH	1MOH		2MOH, 1WHO	6
Research & policy development			1MOH	1MOH, 1WHO	3
Less health outcomes**	1NAT	1MOH			2
Routine WHO support ($, other)	1MOH	1INT	2MOH	1WHO	5
Availability of reliable information		1MOH, 1INT		1INT	3
Absence main counterpart MOH		1MOH	1MOH		2
Training and capacity building		2MOH			2
Norms and guidelines lacking				1WHO	1
Less resources mobilised			1MOH		1
TOTAL	11	17	12	18	58

* NAT= National NGO; INT= International Stakeholder; MOH= MOH staff; WHO= Country team staff

** in relation to less prevention and control of infectious diseases

All stakeholder groups identified the MOH service-delivery capacity, and the partnerships and coordination as elements that would be affected if WHO did not assist EPR in Nepal. All stakeholder groups said that other partner would need to come in as well. Technical assistance would suffer and epidemic response would be less efficient. In page 115, Table 17 illustrates other elements that would be affected, and **Figure 13** maps these elements by stakeholder group. Only the MOH mentioned the mobilization of resources, training and capacity-building, and having a permanent counterpart, as elements that would be affected if WHO were not in Nepal; and WHO was the only group who mentioned the lack of norms and guidelines.

Table 17. Elements that would be affected in addressing major events in case that WHO were not in Nepal, perception of stakeholders (N=20), Nepal 2007

	National NGO (n=1)	Ministry of Health (n=10)	WHO (n=3)	Other external partners (n=6)	TOTAL
MOH service delivery capacity	1	4	2	3	10
Partnerships and coordination	1	1	1	2	5
Others would need to come in	1	1	1	1	4
Technical assistance	-	6	1	2	9
WHO presence, "always there"	-	1	1	3	5
Epidemic response delayed/limited	1	4	1	-	6
Research & policy development	-	2	1	-	3
Less health outcomes*	1	1	-	-	2
Supplies/operational WHO support	-	1	1	-	2
Financial contribution from WHO	-	2	-	1	3
Availability of reliable information	-	1	-	2	3
Absence main counterpart MOH	-	2	-	-	2
Training and capacity building	-	2	-	-	2
Norms and guidelines lacking	-	-	1	-	1
Less resources mobilised	-	1	-	-	1
TOTAL	**5**	**29**	**10**	**14**	**58**

*= mentioned in relation to weakened prevention and control programs

Figure 13. Elements that would be affected in addressing major events and epidemics, if WHO were not in Nepal, perceptions of stakeholders, Nepal 2007
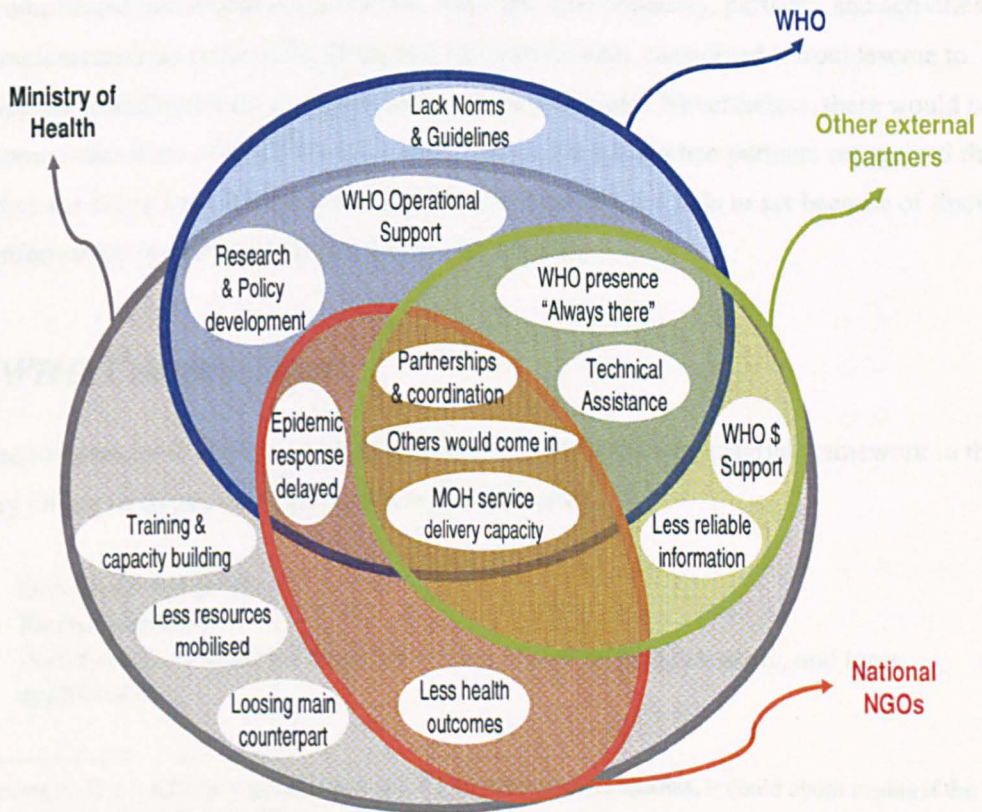
Approaching WHO attribution of results in EPR seemed cumbersome to the stakeholders interviewed. Their replies fell into three categories:

- **Organizational mandate.** This position was illustrated by considering that the MOH is the implementing agency, which WHO supports. Therefore, WHO could say that it had contributed to the results that the MOH had achieved. The attribution would be recognized in terms of process towards health policy in the counterparts' reports. In one extreme, the attribution would be a function of WHO responsiveness to the needs that the counterpart would put forward to WHO.

- **Number of partners.** Attributing results would be a function of the participating stakeholders and their inputs to EPR. Since the number of stakeholders at province level and their collaboration mechanisms had increased recently, it would be complicated to address attribution issues through linear logical frameworks.

- **Contribution.** Some interviewees considered that the link between contribution and attribution was clearer in projects where agencies would be responsible for specific activities, in particular for supplies provision[35]. Epidemic responses would be relatively complicated but remain approachable, since the time boundary, partners, and activities implemented are retrievable. However, the interviewees considered it troublesome to approach attribution for functions such as "coordination". Nevertheless, there would be some indications of an efficient coordination mechanism, when partners recognized that they are being kept informed of a situation, or that they are able to act because of shared information or participation in a functional network.

5.4 WHO Country Team

This section deals with three inter-related elements in the WHO managerial framework in the Country Office in Nepal, relevant to the present research:

- Organizational profile
- Planning process
- Performance assessment (individual, plan of action, programmatic, and tools appreciation)

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[35] For example, if one agency supplied impregnated bed nets to communities, it could claim results if the incidence of malaria cases decreased.

5.4.1 Organizational profile

This section addresses several aspects in relation to the organizational profile (**Diagram 16**).

Diagram 16. Aspects on organizational profile, WHO Country Team, Nepal
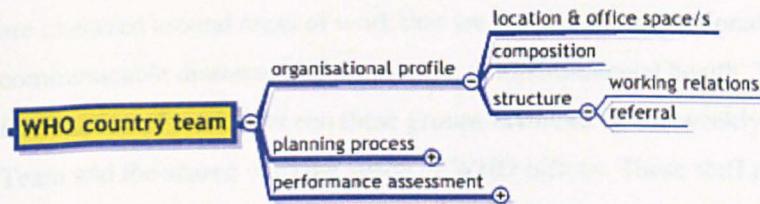
WHO offices in Kathmandu are located at the United Nations House in Lalitpur, together with other United Nations agencies. All technicians have working desks in a shared space environment in the WHO offices. However, their main desk is within the MOH premises, where they work from 10:00 to 17:00. WHO staff come to the WHO office outside the MOH working hours for meetings, or communications, since the connectivity is better.

The WHO Country Team is composed of 94 people, of whom 62 work in the Vaccine-Preventable Diseases programme. The WHO Country Team also includes a focal point responsible for monitoring and evaluation that supports other staff with follow-up and analysis of the implementation of the plan of action.

The team working specifically in EPR is lead by a medical epidemiologist, and supported by two epidemiologists working specifically on dengue and malaria. In addition, there is a programme assistant in this team. Working closely with the EPR team is the team addressing natural disasters and emergencies. These teams are used to working together and have been in their posts for several years, thus having an accurate knowledge of the EPR programme and of the contextual factors affecting the addressing of major events and epidemics in Nepal.

The composition of the above two teams has been growing steadily as additional funding was made available to WHO. However, this increase has been gradual with staff on temporary contracts for specific assignments (for example, dengue, malaria), while keeping fixed-term staff for the leaders and the administrative structure of these teams.

There are weekly meetings for the entire Country Team. These meetings include a systematic follow-up of the plan of action and presentations from technical staff on topics agreed beforehand. Notes of the meetings are filed for further consultation as needed.

The Country Team is structured hierarchically as a professional organization. The technicians are clustered around areas of work that are lead by an internationally-recruited staff, such as communicable diseases, health systems, or environmental health. There is a considerable cross-fertilization of work between these groups favoured by the weekly meetings of the Country Team and the shared working space of WHO offices. These staff refer to their technical area of work at WHO regional level. However, for specific projects, they do active follow-up with WHO headquarters, in particular for the work on emergencies or neglected diseases.

Technical staff report to the head of the technical cluster to which they belong. The Country Representative is the first level supervisor of the senior technicians, and the second level supervisor of the rest of the Team. The second level supervisor of senior technicians is the Regional Advisor of the area of work at the WHO Regional Office.

5.4.2 Planning process

This section outlines the salient aspects concerning the planning process to the interviewees. It applies to the areas of the research, although not exclusively (**Diagram 17**).

The planning process of the 2008-2009 plan of action involved staff from WHO and from the MOH actively. It resulted in a plan of action composed of activities expected to produce results that are specific to the Nepal Country Office. Some of the activities are charged against funds of the WHO country regular budget. Other activities are put against other resources that are secured, or else that are identified as "unmet needs".

Diagram 17. Planning process, WHO/Nepal plan of action 2006-2007 and 2008-2009
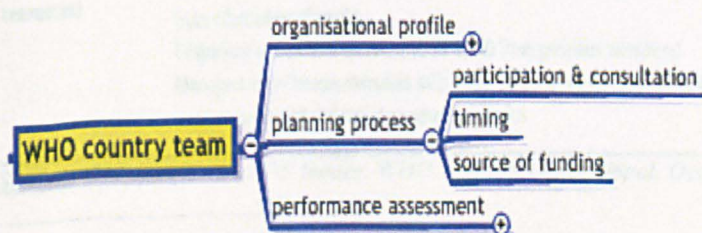
All interviewees agreed on the participatory nature of the planning process. They also agreed on the efforts to ensure that the plan of action is relevant to the country needs and aligned to Nepal's Three-Year Mid-Term Plan and the WHO Country Cooperation Strategy (2006-2011).

The interviewees noted that the timing of planning for 2008-2009 started (April 2007) several months before the 2006-2007 plan was completed (December 2007), and that therefore, when the 2006-2007 plan was evaluated (October - December 2007), the new 2008-2009 was already identified (September 2007)[36]. Thus, the timing lacked coherence. Another factor that lacked coherence was to include details up to the activity in EPR in the early phase of the planning process. The interviewees expressed their preference of stopping the level of planned details at product level, and identifying the activities when the timing for implementation approaches.

Table 18. WHO/EPR plan of action, activities planned and implemented, Nepal 2006-2007

Plan of Work 2006-2007	Activities
Activities Planned (Regular budget)	Integrated Disease Surveillance and Response Field Epidemiology Training Program International Health Regulations (IHR2005) Public Health Laboratory Network
Activities Implemented as Planned or Reprogrammed (Regular budget)	Support to study by MOH on core capacities of the national surveillance system Ground work for the establishment of Field Epidemiology Training Program in Nepal, International Health Regulations (IHR2005) launching and preparation for implementation (assessment core capacities, training), Technical and advocacy meeting on hepatitis E, after the outbreak in khatmandu in 2006, Dengue haemorrhagic fever guidelines & training Pandemic Influenza (Rapid diagnostik kits, circulating serotypes, AFRIMS/ transport, training of national focal points, Supplies and equipment and personal protective equipment as contingency stock),
Added and implemented (Other resources)	UN Pandemic Influenza Preparedness Plan (nat capacity bldg, tools/Training of Trainers, health volonteers, annual vaccination, UN Plan) (US$ 80,000) Technical assistance to World Bank project to strengthen NEP Pandemic Influenza National Preparedness Plan for next 4 years (US$ 2.3million) Outbreak communication for journalists (US$ 10,000 from Regional Office>￼ Development of a data management software/outbreak management system for MOH at central and district levels (US$ 14,000 from other areas of work) Upgrading of EDCD warehouse (US$ 1,000 from previous biennium) Management of human infection with avian influenza (with funds from Regional Office) Support to several outbreak responses/epidemics

Source: Discussion with EPR leader, WHO Country Office Nepal, October 2007

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36 Deadlines for the planning and assessment processes are decided at headquarters level.

The planning process for 2008-2009 included several rounds of work to draft the plan of action. It also included a two-day negotiation between senior staff from the MOH, and from WHO country and regional teams[37]. This planning process was perceived long and complicated.

> *"First we comment on Office Specific Expected Results, and then feedback. And then on products and then feedback. And then on activities and then feedback. At least four or five times we have planned for the next biennium. It has taken seven months." [21]*

The interviewees saw differences on the planning process in relation to the funding source:

Regular budget. Regular budget funding was the focus of the above planning process. However, the amount of regular budget funding is several-fold inferior to the overall budget for the areas of work most related to EPR. As a result, the effort invested to plan for the regular budget is not proportionate to the overall funding of the area of work, which depends heavily on extrabudgetary resources.

The MOH staff considers regular budget resources as theirs. As such, their primary concern is to fill gaps in funding or support MOH operations.

> *"This money responds to our needs. We are fully involved in the planning. This is our money because WHO is here to help us... All partners are equally important. But WHO is different. WHO money is from the contribution from other countries. The voluntary contribution is different of course. It behaves as money from others partners." [9]*

Other resources. A considerable proportion of the resources that WHO uses to support addressing what the interviewees considered being major events and epidemics, comes from the Regional Office or is mobilized locally. In particular, epidemic responses fall in this category. Depending on the event or epidemic, other programmes such as the one dealing with Vaccine-Preventable Diseases (e.g. Japanese Encephalitis, measles) or the programme dealing with health emergencies, support responses as well (e.g. cholera). Therefore, the planning of these resources respond to *ad-hoc* epidemic responses' needs.

5.4.3 Performance assessment

The research looked at performance assessment from four perspectives. These included individuals, systems and procedures, biennial plan of action, and technical programmes (Diagram 18).

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[37] The Nepal Day took place in New Delhi in February 2007.

Diagram 18. Performance assessment, WHO Nepal
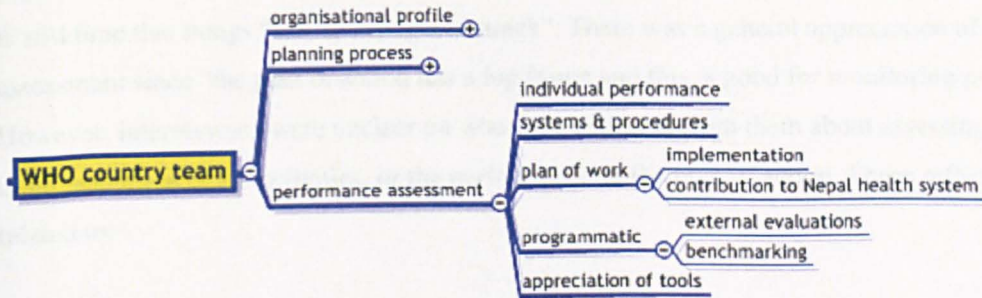
Individual performance. Staff interviewed appreciated the opportunity that the individual appraisal system provides for discussion with the supervisor. They appreciated having an opportunity to look back and reflect on what they have done. At the same time, interviewees deplored that the internal validity of the tool depended on "how eloquently the staff wrote about what he/she had done" and on the subjectivity of the grading used.

Systems and procedures. The Country Office developed and started using an integrated system linking various elements of the work of WHO in Nepal, making it available on line for the staff in June 2007. The system allows tracking technical missions from the Regional Office and headquarters, and the follow-up of their recommendations; assessing training activities systematically; or analysing outsourced work and fellowships. Staff consider this tool useful because it allows analysis on the efficiency of operations, and animates discussion and comparison on performance-related issues. They consider the system helpful to maintain the institutional memory of the team, since staff rotation is high.

Assessment of the plan of action. All interviewees from the MOH and the WHO Country Team had been involved in assessing the implementation of the biennial plan of action. There are two types of assessment, continuous and periodical. Firstly, there is a continuous WHO internal assessment of the plan of action through the weekly meetings of the WHO Country Team. Staff considered this assessment useful although they regretted its focus on the financial implementation of the regular budget.

> *"The only indicator of success is budgetary implementation. Nobody seems to care about the impact of WHO programme on the poor or underprivileged... I use the plan of action a lot because this is what we are evaluated against... But since 80% of my time was to address the health needs through the voluntary contributions, this had little to do with the tools and systems of the regular budget."* [21]

Secondly, the plan of action is assessed every six months, jointly with the MOH staff. The mid-term review (after 12 months) is considered useful in relation to the timing, because there is still time that things "can be brought on track". There was a general appreciation of this assessment since "the plan of action has a log frame and this is good for monitoring purposes". However, interviewees were unclear on what was expected from them about assessing the implementation of the activities, or the performance of the plan of action. These reflections related to:

- A lack of benchmarking of the EPR programme to guide WHO support in EPR in a specific country, compare it to other countries, and analyse the progress of national EPR programmes among countries.

- WHO not being a direct implementer but retains overall accountability of the programme, relying on the assessment of the MOH:

- Not being suitable to estimate the impact on the EPR programme, because the baselines that contains are related mostly to outputs, rather than outcomes or impact:

- Not including the effect of confounders in the analysis of results reported in the plan of action.

The WHO Country Team organized a two-phase assessment of the "WHO Collaborative Programme in Nepal 2006-2007". The first phase was internal to WHO staff and included a financial, management and administrative review (August 2007). The second phase consisted of a two-day *informal* seminar on the WHO contribution to the Nepal health system (October 2007). All senior MOH staff and the entire WHO Country Team participated in this seminar, and discussed progress in each of the areas of work of the WHO plan of action:

> *"On meetings like this, we comment on what is lacking, but we do not use indicators. We look at what WHO provides. This is very useful for a country like Nepal. However, for EPR, it should be an in-depth review of the national programme..." [27]*

The participants identified some factors that had affected their day-to-day work across all programmes, such as the strike of the health workers, the "Maoist problem", or the lack of infrastructure from the Government to deliver basic health care services. Aspects specific to the assessment of EPR and EPR-related programmes include (See further details in Annex 19, page 215):

- All programmes credited the contributions from other partners and/or the coordination mechanism they have at national level.

- Financial resources or the lack of focal points/national counterparts did not constitute a serious constraint to implement most of these programmes.

- Main constraints related to socioeconomic underdevelopment, instability of teams of the MOH, little sustainability of programmes that were 100% externally funded, and specific technical constraints of each programme.

- All programmes had carried out operational research and some had linked it to policy development.

- Decentralizing disease control and epidemic response, and articulating the different disease control information systems were priorities that the MOH should deal with in the future. Other important issues included capacitating health staff in monitoring and evaluation, and involving more stakeholders in the various programmes.

The interviewees viewed the above session as a useful tool between WHO and MOH staff. However, they were unclear with respect to the links of this exercise and the end-of-biennium report of the plan of action, and about its impact on the 2008-2009 plan of action. It was the first time that the Country Team had done this type of assessment, and therefore they considered it as an experience from which they could learn lessons for the future.

WHO staff expressed concern about what they considered useful work that remains largely un-assessed or ill-assessed through the above mechanisms. In particular, the interviewees mentioned the coordination function, and the support that they provide to other stakeholders and that it is not included in the plan of action.

Other programmatic assessment. Most of the interviewees referred to the joint country programme reviews that the tuberculosis, HIV/AIDS, or Vaccine-Preventable Diseases programmes do. The interviewees considered these evaluations a transparent way of attributing credit to the stakeholders, building-capacity, and fostering dialogue on programme findings. Thus, "their recommendations become more acceptable to the evaluees".

The evaluative work directly related to EPR includes that on the Early Warning and Reporting System that USAID led in 2003, and the MOH assessment of core capacities on surveillance and response at district level of 2007. The interviewees referred to them as opportunities for programme development. In particular, the latter, led by the MOH, came across during interviews and at the seminar on the WHO Collaborative Programme Evaluation as a convincing argument of what needed to happen in the near future.

Appreciation of tools and systems to assess performance. WHO staff appreciate the individual performance assessment system because it gives them a chance for dialogue with the supervisor and for taking stock of their work. However, they were concerned about the internal validity of this assessment and the lack of follow-up and feedback from the second level supervision.

WHO staff considered that the assessment of the plan of action through the six-month periodicity provided a framework for analysis, and facilitated reflection of the daily activities into a broader perspective. However, they criticised the current assessment, skewed towards the components funded through the regular budget, and its focus on financial implementation rather than technical contribution. Therefore, for EPR-related programmes, which rely heavily on extrabudgetary resources, the interviewees were concerned with the effort invested in relation to the proportion of overall programme resources. The staff considered that the assessment and reporting of extrabudgetary projects to donors had more impact on their programmes and operations than those of regular funding. They also considered that the influence of the periodical assessment of the plan of action on the work of the Country Team was limited, and some alluded to insufficient feedback from the WHO regional level to guide the work of the Country Team as a reason for it. The timing of the 6, 12, and 18-month assessments was conducive to having an impact on the programme. However, the timing of the review at the end of the biennium does not allow an adequate reorientation of the next plan of action, which is already mostly decided by then.

Most of the Country Team approved of using the Activity Management System as a support system to assess the plan of action. In EPR, where re-programming of activities is frequent and unplanned activities - such as epidemic responses - recurrent, the Activity Management System lacks flexibility. Therefore, its effectiveness for managing EPR is limited.

The Country Team is piloting a tracking system that connects all elements of the plan of action in a single database. It allows analysis of quality control of the process of implementation and could be used also for cost-effectiveness analysis in the future. This tracking system is more responsive to the needs of the technicians of the WHO Country Team. It influences the follow-up of programme implementation with national counterparts.

WHO staff have expectations on the new integrated management system across WHO, the Global Management System that will be launched in 2008. Some interviewees foresee resistance to change to the new system from staff who are not computer-oriented.

Concerning the assessment of WHO technical contribution in EPR and related programmes, interviewees mentioned the programmatic benchmarking and national programme evaluations. Programmatic benchmarking provides internal assurance of the quality of the WHO programme and allows comparison between countries with respect to the assistance provided. This programmatic benchmarking exists in some programmes and was introduced recently in the programme on emergencies. However, it is not yet available for EPR. External evaluations are a tradition in some programmes that have national inter-agency coordination mechanisms. However, this mechanism is not well established for EPR. This is partly due to having *ad-hoc* national coordination mechanisms in case of emergencies and/or epidemics, rather than permanent committees guiding the programme.

5.5 Main issues

The interviewees attached importance to events that caused much morbidity or mortality, to events recurring every year, and to events reflecting an emerging public health problem. The interviewees often linked these events to the underdevelopment conditions affecting most of the communities, the proneness of Nepal to natural disasters and emergencies, and the weak performance of the surveillance system. The link between these major events, in particular diarrhoeal diseases, and underdevelopment conditions and social beliefs in Nepal has been described by some authors (Pokhrel and Viraraghavan 2004).

The interviewees attached significance to other events of infectious diseases because of the political impact they had had, overriding their importance in public health terms.

The resistance to antimicrobials as an emerging public health problem, thus an event despite the little attention it receives from the MOH was put forward by some interviewees and has been described by some authors (Tamang, Oh et al. 2007)

None of the interviewees referred to HIV/AIDS as a major event in Nepal spontaneously. However, after prompting their opinion, some interviewees recognised that HIV/AIDS is a public health problem. HIV/AIDS in Nepal has been termed as an "impending crisis" (Seddon 1998) partly associated with international migration between India and Nepal (Poudel, Jimba et al. 2004). However, crucial knowledge on sexual behaviour among the general population is lacking (Furber, Newell et al. 2002).

Dealing with major events and epidemics was much contextualised in difficult living conditions, and hard-to-reach populations who had their own approach to health and health care seeking behaviour. These contextual factors were present not only in relation to major events (Sharma 2008), but also in how populations medicate themselves or use non-doctor prescriptions (Shankar, Partha et al. 2002; Sreeramareddy, Shankar et al. 2006), and in how they seek help from traditional healers (Jimba, Poudyal et al. 2003; Poudyal, Jimba et al. 2003) and from other health professionals (Das, Deo et al. 2005). Stapleton has described the perceptions and practices of communities towards diarrhoeal diseases (Stapleton 1989) in line with the views from the interviewees, especially in rural areas.

Moreover, the capacity of the MOH was overwhelmed and unable to absorb all support available in the midst of the decentralization process, despite being motivated. The reported absence of proper decentralisation policy dialogue in some infectious disease control programs (Newell, Collins et al. 2005; Collins, Omar et al. 2007), or inappropriate human resources policies (Asbroek, Delnoij et al. 2005) seemingly contributed to the current situation.

Finally, there were broad socio-political factors that the interviewees considered important. Nepal is considered a fragile state where the transition process to peace and stability has not been smooth (Cammack, McLeod et al. 2006). The impact of the armed conflict on health is difficult to assess because Nepal does not have a reliable birth and death registration system nor has it conducted specific surveys in this area. Silwal et al. describe relatively little disruption of the immunization services in Nepal despite armed conflict (Silwal, Jimba et al. 2006) and refer to the employment of trained indigenous workers as a partial explanation that

allowed the building of trust among stakeholders. However, there is strong evidence that combatants prevented civilians from accessing health services and restricted the activities of health staff (Bornemisza and Checchi 2007). Some authors have described the violent conflict as disrupting the society (Singh 2007) and fuelling epidemics, in particular that of HIV/AIDS (Singh, Mills et al. 2005), or challenging the implementation of health policies (Adhikari and Maskay 2004; WHO 2005; Singh, Bohler et al. 2006) and the work of the health staff (Poudyal, Jimba et al. 2005; Singh, Bohler et al. 2006). The interviewees in the current study linked these contextual factors with tensions in the stakeholders' implementation agendas. The latter wished to implement projects as if the situation had stabilized, when indeed it remained fragile.

The development of all sectors of Nepal has been depending heavily on external aid for the last decades (Khadka 1997), and there has been much discussion on ways to improve the effectiveness of development aid (Panday 2002; Cammack, McLeod et al. 2006). Health is one of the most supported sectors and there are numerous partners working with the MOH and related sectors through sector-wide approaches and on specific projects. A review of the International Health Partnership noted that the alignment of partners to these two broad camps "creates complexities that further entrench positions and threaten donor relations" (Conway, Harmer et al. 2008).

All stakeholders interviewed in the present study were supportive of the MOH and felt part of a network working through the day-to-day challenges of infectious diseases. Nevertheless, surveillance of infectious diseases or EPR were not identified as priorities within the Three-Year National Health Plan. Therefore, the support that the stakeholders provide in this area is for *ad-hoc* epidemic responses and earmarked funding for specific projects (e.g. World Bank for Pandemic Influenza Preparedness Plan). In addition, stakeholders support programs through WHO (e.g. USAID to the programme on Vaccine-Preventable Diseases).

There was criticism of interventions from stakeholders where sustainability is unlikely in the absence of continuous massive external funding. Discussions on the sustainability of programs that are externally funded in Nepal is not new, and some authors referred to it with respect to the lung health initiative introduced in Nepal in 2002 (Asbroek, Delnoij et al. 2005) and tuberculosis control (Hurtig, Pande et al. 2002). The assessment that the USAID carried out in March 2004 on the Early Warning and Reporting System in Nepal identified the MOH commitment and the MOH ownership as two of the strengths of the programme. The

assessment also identified the absence of a national plan or policy on integrated surveillance of infectious diseases and the sustainability of the Early Warning and Reporting System –heavily dependent on the decentralization process and requiring considerable funding from central level- as two of its weaknesses (Pyle, Nath et al. 2004). The interviewees in the current research recalled this System as a useful structure that should be revitalised, despite being under-funded and dysfunctional at present.

There was criticism also with respect to the short sightedness of the interventions of some stakeholders. Other times, there was criticism for emphasizing external support to programmes that were performing acceptably per international standards and were properly managed through national mechanisms.

Most interviewees appreciated the technical profile of WHO and its support in EPR. However, some voiced a need for WHO to be more explicit about its role *vis-à-vis* the NGOs and about how it makes decisions, and to share its plan of action with other stakeholders. This was an important point to the international interviewees who called for WHO coherence concerning the harmonization and alignment that the International Health Partnership is promoting.

The interviewees considered a similar proportion in the number of short and long-term components in the national system to address major events and epidemics. This applied to all stakeholder groupings except for the national NGO. This NGO considered four main components of the current system to fight infectious diseases, out of which three referred to short-term action (Table 12, page 108). When enquired about the main achievements of the health authorities in dealing with infectious diseases, the stakeholders identified a similar proportion of short and long-term achievements (Table 13 page 109). All stakeholders coincided in signalling that the coordinated outbreak response and the training of Rapid Response Teams were among the main achievements of the programme since January 2004. With the exception of the national NGO, the other stakeholders identified the strengthening of laboratory services and surveillance, and having a MOH surveillance infrastructure and network at central and peripheral level, among the main achievements of the programme.

There were three broad categories of what "results" in EPR meant to the interviewees. Firstly, "results" referred to decreasing the burden of disease and dealing with the situational problem that the outbreak represented. Secondly, "results" were the expression of a part of a process

previously disclosed or framework established. Thirdly, "results" exemplified the means to achieve other things. In particular, results were seen as a function of government legitimacy and transparency that can foster country stability. Results exemplified the production of positive externalities by strengthening surveillance and training staff (dengue, cholera), or when an emerging problem is uncovered so that others can prepare for it (Japanese Encephalitis, dengue).

The 'non-achievement of results' in EPR meant the inability to tackle a situation that continues to be problematic in the long term, because the intervention did not deal with the root cause (cholera) or was insufficient (Japanese Encephalitis), often failing to address the event related to broader processes[38]. Some interviewees considered that the responses had dealt fully with the events (gastroenteritis) and had no suggestions for improvement for future responses. Nevertheless, the predominant view of the interviewees admitted the need for proper outbreak investigation and fine-tuning of readiness systems to remedy future situations.

Most of the contribution from WHO to the current system for dealing with major events and epidemics fell within three of its core functions in countries. In particular, providing technical assistance and building national capacity; providing leadership and fostering partnerships; and to a much lesser extent, promoting the application of norms and standards. Moreover, the interviewees referred to these two functions in relation to WHO "being there" and working closely with the partners. WHO provided support to routine operations, in particular through the provision of supplies, equipment, or funding for the initial phases of epidemic responses. Lastly, the interviewees commented the direct participation of WHO in operations and/or advising other partners in their direct interventions (Table 14, page 112).

All interviewees considered that WHO facilitated the MOH response to major events and epidemics. Few among them considered that the situation would be disastrous if WHO were not in Nepal, and some interviewees could not imagine that this was an option, since WHO "*had been there always*". For the majority of the interviewees, the situation would either be disrupted and others would come in, or else, the situation would be much disrupted. The capacity for service delivery of the MOH was identified as the element that would be most affected across all stakeholder groups. There would be less coordination, and engagement in partnerships

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[38] Related to the decentralization of the health system, hardness in reaching populations, or country's instability.

would be more difficult. Inevitably, other partners would need to come in. All stakeholder groups, except the national NGO, would miss WHO presence and the technical assistance that it provides. The MOH interviewees commented that if WHO were not in Nepal they would mobilize less resources and have fewer training opportunities, in addition to losing their main counterpart. This "main counterpart" relation referred to being able to work day-to-day in the long run, rather than having somebody doing things for the MOH or providing funds.

There were problems with the current use of the tools and systems to address performance in the area of EPR, which were partly due to:

- Identifying the plan of action up to activity level too early. There are many activities that need change between the agreement of the plan of action and the moment when its implementation starts. In addition, there are *ad-hoc* activities that result in reprogramming or adding to the program of action throughout the biennium (**Table 18**, page 119).

- Emphasis put on budgetary implementation, in particular for the regular budget. Due to the above reprogramming or addition of activities that are funded from other sources, looking at performance from a budgetary performance perspective only is misleading.

- Exclusion of a considerable proportion of the WHO contribution to addressing major events and epidemics from the assessment of the plan of action. In particular, work on advocacy, leadership, and partnership development (Table 14, page 112).

- Focus of assessment of the plan of action on implementation of activities, rather than on the contribution to results at the end user.

To address the above issues -not restricted to EPR- the WHO Country Team is piloting an integrated tracking system linking the administrative and technical follow-up of activities. In addition, the Country Team undertook the WHO Collaborative Programme Evaluation in 2007, which provided a comprehensive briefing on the implementation of the plan of action. However, it did not address what had been the contribution to the National Plan. Moreover, it lacked a structured discussion and debate on the issues that needed to be addressed in future plans of action. For several reasons this seminar took place too late to have much effect on the next plan of action, that had been agreed upon already due to the planning cycle needs.

The Country Team follows up on the budgetary implementation of the plan of action on a weekly basis. This follow-up has an impact on the operations of the office and *vis-à-vis* the MOH. In addition, the Country team reports on technical progress of the plan of action periodically. There are links between the assessment of the performance of the plan of action and the performance of individuals. Nevertheless, staff are unclear about the impact of this tool in their contractual relations with the organisation.

The interviewees considered that in-depth reviews of the national programmes were the most appropriate mechanism to assess contributions from stakeholders, and that having a structured approach to assess WHO programmes across countries is useful because this allows comparability and the establishment of benchmarking of the support from the Organization.

The comparison of the above findings to the assumptions in the framework on results-based management of WHO country support to EPR (See Figure 4, page 43) uncovers the following:

Planning. The planning process allows a proper identification of needs in EPR in Nepal. The funding allocation is guided by the needs in programmes that are not fully addressed through the Sector-wide approach strategies, and by the WHO Country Cooperation Strategy. The process is asymmetric towards the MOH for a proportion of the WHO regular budget. This represents a minor proportion of the investment of WHO in the programme.

Organizing. The plan of action is agreed upon and resources are made available in a timely manner. However, the plan of action does not foresee sufficient resources for epidemic responses. In the period considered by the research, these additionally-needed resources have been provided through other levels of WHO or locally through donors in a timely manner. Nevertheless, there are conditions that are not conducive to improving EPR. These include insufficient service delivery capacity at the MOH at central and regional/district level, and a weak surveillance system with a dysfunctional network of public health laboratory services at district and regional levels. The difficult geographical conditions where some of these outbreaks occur and the instability due to country security, challenge the support from WHO and MOH teams as well.

Implementing. By the end of the biennium, the WHO Country Team had implemented a plan of action consisting of 35% of the activities initially planned, with 65% re-programmed

activities. In addition, the Country Team carried out a number of activities that were considered necessary to support MOH in addressing epidemics, and that were funded externally to the country regular budget, through technical and financial support from the regional office or headquarters.

Reporting and monitoring. Systems and tools monitored the implementation of the plan of action in budgetary and activity terms. However, these systems failed to assess the performance of WHO in terms of contribution to the improvement of the national capacity in EPR. There were critical processes that these tools did not capture and that therefore will not inform plans of action. For example, there has been no collective analysis of the issues that the various stakeholders faced when supporting Nepal in addressing the major events and epidemics that could guide WHO programmes in the future. The analysis of how Nepal can deal with infectious diseases and the decentralization of the health sector, is also absent. WHO country operations are guided by the availability of resources and by the needs, rather than by results.

The above raises several issues, including those related to a) the design of the tools, not set up to address the contribution of WHO to the national programme; b) the use of the tools, that staff did not use them correctly; and to c) the assumption by staff that the tools were adequate, thus, not using complementary approaches such as evaluation.

6 Discussion

This chapter compares the main issues identified in the Myanmar and Nepal case studies, and discusses their implications for the performance assessment of the EPR programme of WHO. The chapter is organised in eight subsections. The first three subsections set the scene and include the contextual factors, the stakeholders support to EPR, and WHO country teams. Thereafter the chapter discusses how performance is assessed and what the appreciation of the contribution of WHO to EPR is. The chapter finally discusses the suitability of logical framework approaches to assessing the WHO core work on EPR, the compatibility of EPR programmatic needs and the WHO results-based management approach, and some unintended effects observed while using logframes.

Most of the sub-sections focus on the results of the interviews in each country. However, the sub-sections on how performance is assessed, and how performance assessment is used in both countries, result from the documentary review of their formal planning and reporting documents (See Annex 20 in page 216 for detailed information).

The case studies looked at the individual and programmatic performance of country teams from a results-based management perspective. In particular, they looked at the role and use of logical framework approaches as one of the components of results-based management. However, during the interviews the boundaries of both terms were blurred and at times interviewees referred to them indistinctively.

6.1 Contextual factors

Myanmar and Nepal are both developing countries that belong to the so-called "fragile" states. In both countries, the interviewees referred to broad intersectoral issues such as the political processes, and country instability and security as important when preparing for or responding to major events and epidemics. Limited resources, with hard-to reach populations, and cultural and traditional attitudes of communities towards infectious diseases were other characteristics shaping the fight against these major events.

The interviewees praised the dedication and efforts of the health staff despite adverse working conditions, and referred to some challenges when dealing with MOH. These challenges included operational day-to-day coordination between WHO and MOH, and the government limited disclosure of some epidemics in Myanmar; or the limited capacity of the MOH to deliver services and the decentralisation process that affect EPR in Nepal.

WHO routine assessment systems and tools of EPR plans of action do not refer to these contextual factors explicitly. However, all stakeholders' groups in both countries referred to them as critically important when addressing epidemics. Stakeholders from development agencies in both countries regretted that WHO reported on these issues rarely. In particular, interviewees from donor agencies mentioned that understanding better the operational challenges that WHO faces when supporting EPR programmes would help mobilise additional resources at country level.

Roche argues about the need to consider different performance assessment mechanisms when the situation justifies it (Roche 1994), such as for fragile states, where issues of governance and operational field conditions are prominent. In the case that the challenges are not discussed, there is a risk to consider that the EPR programmes could be supported as in other (non-fragile) states, where the challenges are fewer.

6.2 Stakeholders support to EPR: global declarations, local perspectives

Surveillance of infectious diseases is a recognised transnational or global public good (Smith, Woodward et al. 2004; Barrett 2005) which national and international stakeholders are calling for action on (Calain 2007; 2008; Balmer 2008). In practice, however, surveillance of infectious diseases faces considerable challenges because global and country perspectives differ (Smith, Woodward et al. 2004; Calain 2007), and because there has been a shift away from support to general surveillance system towards specific diseases (Lele, Ridker et al. 2005; Murray 2005), which skews resources towards vertical programmes (Barrett 2005; Tobar, Gurtler et al. 2006; 2008).

Interviewees in both countries showed concern with the delivery of external assistance directly to regional and provincial levels, or through stakeholders other than MOH. This practice, in their view is not sustainable and undermines the governance of their already fragile states. Some interviewees referred to NGOs' limited impact due to their geographically circumscribed work. In addition, they criticised them for developing parallel surveillance mechanisms, being expensive service providers (especially the international NGOs), and taking on government's roles. The donors and NGOs justified these practices arguing the need to provide health services efficiently to those who need them most. Interviewees also recognised the pressure from international stakeholders to deliver services directly to populations rather than supporting the central level of the public health system. They resented that the current practice has created parallel systems for provision of health services without integration in the public health reporting system. This is important for the national EPR programme that lacks resources at the central level of the MOH to maintain effective surveillance systems and a network of public health laboratory services.

The above findings converge with the literature concerns on the unintended negative consequences of these donor practices on public sector capacity, commitment and accountability (Anderson 2005; Birdsall 2005; Isenman 2005; Fritz and Menocal 2006; Unger, De Paepe et al. 2006). The analysis of contracting out health services in fragile states and low and middle-income countries has raised attention to its potential impact on long term health systems development, the role of the government, and the sustainability of such mechanism (Palmer, Strong et al. 2006; Unger, De Paepe et al. 2006; Doyle and Patel 2008). Birdsall refers to seven "deadly sins" that development agencies commit, such as their impatience with institutional building, or 'foolishness not to fund regional public goods'(Birdsall 2005). These observations, both relevant to EPR, coincided with the views of the interviewees from both countries.

Both countries studied lacked core funding for disease surveillance at the central level of MOH. They had a fragmented surveillance system with resources skewed by levels (towards the regional level), by programs (towards epidemic response rather than preparedness), and by actors (towards NGOs rather than public sector). Therefore, the countries studied do not constitute examples of balanced resources and strengthened governance that the international community is calling for to enable the production of global public goods (Smith 2006; 2008).

The OECD recommends focusing on partial alignment through "transitional results frameworks" working with regional or local governments for those fragile states where government ownership and leadership are weak, such as Nepal. Moreover, it recommends focusing on alignment, and on harmonisation to support that alignment for fragile states with strong government leadership such as Myanmar (Isenman 2005). At the same time, a study on development agencies' perceptions on aid effectiveness in Myanmar conceded that a) harmonization is difficult because of the divergent policies among stakeholders towards aid; b) alignment is difficult because some doubt whether they should support the government; c) managing by results is constrained by the lack of a credible national development plan; and d) mutual accountability is not relevant, since most donors are not partnering with the government (Adaeze 2005). Progress with the OECD/DAC Paris Declaration in other countries of South Asia is considered limited due to the different contexts that affect their practice, and to the unclear local definitions of aid effectiveness (Beloe 2005). There is a call for development agencies and donors to "be prepared for failure" and to learn from it, thus the need to develop tools to assess their performance consequently (Fritz and Menocal 2006; Johnson, Scholes et al. 2006).

The research indicated major differences on how the two countries relate to stakeholders in health. Both countries use several coordination platforms such as those of the United Nations, or those for specific diseases. However, Nepal uses several platforms and coordination networks that address issues of standardization and harmonization of external assistance. To the contrary, in Myanmar the MOH coordinates the external assistance with the different stakeholders, without common negotiation platforms. This reflected in the relations among stakeholders that were more used to working together in Nepal than in Myanmar.

This research found that the above prevalent dialogue mechanisms among all partners and proximity among them favoured collaborative work and offered conditions conducive to increased international assistance. The research also found that in case of serious epidemic threat the response engaged by both countries consistently overrides the differences among stakeholders and the operational issues that challenge the routine fight against infectious diseases.

The research also shows the negative effect that the national coordination platforms in Nepal had on programmes such as EPR. Strengthening infectious disease surveillance systems was a

MOH priority. However, the national coordination platform dropped it from its priorities that are now driven by making progress towards Millennium Development Goals. This reflects the influence that internationally led initiatives have in the setting of national priority agendas.

The number of partners supporting EPR at central level was scarce in both countries. This was expected in Myanmar that had been selected for this research based on this criterion. However, this finding came as a surprise in Nepal that had been selected because of the numerous partners supporting the health sector. Most external partners in EPR in Nepal work at regional level, with only one supporting EPR at the central level through WHO. Some external partners provide budget support to the government for selected priority areas that do not include integrated diseases surveillance systems anymore.

The findings of the research mirror the literature on the increased political awareness of specific diseases and the shift away from general surveillance and response systems towards supporting them. The research findings support the need to balance disease-specific and health system-wide policies and strategies (Barrett 2005; Lele, Ridker et al. 2005). Epidemics attracted considerable resources that have helped strengthen surveillance systems, including public health laboratory networks. However, these increased resources have established new mechanisms of service delivery that could undermine the absorption capacity of the government and its governance in EPR in the long term.

6.3 WHO country team

6.3.1 Organisational setting

There were differences in the organizational setting of both countries that help to explain how the country teams use the routine performance assessment systems for EPR.

The location and set up of the WHO country office influenced how its country team related to other stakeholders. Having EPR teams interacting closely on a day-to-day basis with its counterpart and among related programmes was conducive to collaborative work. This is of special importance in EPR, where timely communication and effective coordination are needed to address epidemics appropriately.

The role of the WHO Country Representatives was key in the composition and internal organisation of the country team. The findings also suggest their key role in how the country staff used the tools to assess programmatic performance. The influence that the WHO Country Representative has on the agencies' operations is not specific to WHO, but rather a characteristic of the behaviour of multilateral organisations (Burall 2007), that is "largely attributed to personal factors and not to institutional ones" (Selbervik and Jerve 2004).

Having a team with strong technical capacity was found conducive to collaborative work in EPR. A strong EPR team was important to provide assistance in EPR and to foster a coherent framework for integration of vertical disease programmes and systemic surveillance systems. Conversely, a rapid expansion of EPR team with temporary contracts for specific projects and a higher turn over of staff did not favour collaborative work in EPR.

The relations between EPR and other areas of work within the country team and with the regional counterparts were similar in both case studies. Using the definition of organizational culture[39] as "a cultural web including, among others, power structures, organisational structures, and control systems"(Schein 1985), the findings of this research reflect WHO as a professional organisation, where rules dominate, and where the communication lines and procedures are set (Handy 1999). This results in having lines of communication between EPR staff and staff of this program at the Regional office, and if needed, through them with WHO headquarters. Work across the different technical programmes is uncommon.

The above findings reveal differences between the two WHO country teams. However, there are findings that constitute common characteristics of both WHO country teams that are not fully compatible with results-based management.

Mayne describes twelve key challenges in relation to the implementation of results-based management in organizations and divides them into organizational (seven) and technical (five) challenges. "Fostering the right climate" is one of these organizational challenges, and calls for strong leadership, appropriate incentives, and supporting a learning culture (Mayne 2007). It would entail, for example, valuing and acting upon what works and what doesn't work to

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[39] Schein formally defined it as "A pattern of shared basic assumptions that the group learned as it solved its problems of external adaptation and internal integration, that has worked well enough to be considered valid and, is taught to new members as the correct way you perceive, think, and feel in relation to those problems"

improve performance and promoting well-informed risk-taking (Woodman, Sawyer et al. 1993; Patton 1999; Mayne 2007). A review of the implementation of results-based management in several multilateral and bilateral organisations revealed the importance of allowing mistakes as the basis for organizational learning, the need to provide staff an opportunity to challenge performance findings, and the need for feedback among the organizational levels (Haden 2005) (Binnendijk 2000).

Another organizational challenge is the buying-in and use of the performance information systems across organizations, which is related to organizational learning (Langley 1995; Mayne 2007). This challenge reflects a cultural clash between the various levels of an organization (Earle 2003). The WHO staff interviewed in the two countries reflected well this challenge, perceiving that their efforts in using the performance systems were not reciprocated at the Regional Office level. In particular, they were frustrated because they received hardly any feedback from the systems to appraise their individual performance, or on the programmatic planning and assessment documents.

6.3.2 Operations in each country

The operations at country level in the two countries studied followed similar pattern. The EPR plan of action in both countries was aligned to their Country Cooperation Strategy. The interviewees of the WHO and MOH staff of both countries considered this strategy as a broad framework for WHO action and useful as background document. Both countries are part of the WHO Asian-Pacific Strategy on Emerging Diseases. However, none of the EPR plans of action refer to this strategy. Only two WHO interviewees referred to this strategy and lamented its slow progress at country level. This could reflect a lack of leadership and advocacy of WHO regional office and of the WHO country representative.

The interviewees from both WHO Country teams and the MOH did not consider funding of EPR to be a problem. However, they recognised that activities in the plan of action had been reprogrammed or postponed because of other urgent needs. Nevertheless, the interviewees might have referred to the availability of resources, and not to the resources available to EPR activities in the WHO country plan of action. The review of the assessment of the WHO investment in EPR was not precise, since resources from the Regional Office were not accounted for as investment in these countries. This is a sign of an internal organization-

centred approach rather than a client-oriented approach that tailors the system to the end-user (Wholey 2003; UN 2008).

6.3.3 The planning process

The considerations of the interviewees from the MOH and WHO on the planning process of the 2008-2009 plan of action were similar in both countries. Some of these considerations are not specific to EPR and refer to the overall guidance and requirements of the planning unit of the regional office. The interviewees considered that the current planning process provides a better chance for dialogue and discussion on expectations from WHO and MOH than earlier processes. However, they considered it tedious and its timing not coherent.

The current detailed early planning to the activity level came across as inconvenient, especially in EPR, where epidemic responses and ad-hoc urgent requests for support provoke repeated modifications of the plan. They suggested a more generic approach would address the planning needs in EPR, retaining some flexibility until the approach of the implementation period.

The "ownership" of the EPR plan of action of WHO related to the source of resources and its control. The predominant view is that WHO resources fill the gaps in funding of MOH. The MOH of both countries consider WHO resources to be theirs, in particular the Regular Budget, using it for operational support. WHO staff find it difficult to change a practice that has become a tradition for the last three decades. Nevertheless, the proportion of the Regular Budget represents a small proportion of the overall investment in EPR in both countries. The interviewees from both countries considered that the process of planning under the Regular Budget received much attention in comparison to the total investment in the area of EPR.

The findings illustrate the influence of the source of funding in the establishment of priorities in the plan of action. In the context of scarcity of resources secured for EPR during the planning phase, the planning process is driven by resource availability rather than by results.

These findings support the assumptions of the framework guiding this research (Figure 4, page 43) with respect to the identification of needs through consultation with MOH and alignment to corporate priorities. However, the findings also support the anti-theory that includes an

asymmetric planning process with MOH imposing their priorities for regular budget funding. In both countries WHO could have been more inclusive with other partners working in EPR prospecting future partners in EPR.

6.4 How performance is assessed in each country and what is assessed

6.4.1 What performance is set up against

The focus of attention of the WHO plan of action in both cases is the national EPR plan. However, the comparison of both plans of action reflects a fundamental difference of approach and positioning of WHO that is more holistic and inclusive in Nepal than in Myanmar. This is because the plan of action of Nepal focuses on supporting policy development and providing technical assistance to MOH and collaborating partners, and is worded in terms of functions; while in Myanmar the WHO support is handled through contracts with the MOH or national stakeholders, emphasizing activities that are more concrete.

None of the plans of action included benchmarking indicators on standard WHO support functions to EPR, or benchmarking indicators for the EPR or for implementing the IHR in countries. The indicators used include mostly output, with few outcome indicators. In both cases, most of the baselines and targets are well defined and verifiable.

Noting that the planning process has been similar in both countries, the above findings indicate the influence that the differences in the WHO country teams (profile of the EPR team in WHO or the leadership of the country representative) can play in the orientation of the plan of action.

6.4.2 Views of WHO staff on the use of performance assessment systems and tools

Staff in both WHO country teams raised similar issues in relation to the use of various systems and tools to assess performance, although in Nepal their intake was higher and strongly supported by the WHO country representative.

Individual performance appraisal systems. Staff appreciated the chance to discuss their work with their supervisors, and the progressive standardization of the appraisal system. However, the staff also criticised it. Firstly, they viewed the system as highly subjective and without standard criteria across the Organization, thus, lacking internal validity. Secondly they viewed the system as a bureaucratic process administered at the Regional Office, with only rare feedback to the country team staff. Thirdly, staff were concerned that the system was not rewarding professional excellence, but rather only punishing extreme unacceptable behaviour. Therefore the system is unresponsive to the performance of most staff, and fails to create enough opportunities for their professional growth.

Plan of Action assessment process. Staff appreciate the process involved in the plan of action assessment because it assures administrative and managerial compliance, in particular of Regular Budget funding. However, they were concerned for several reasons. Firstly, there is no analysis of the impact of the plan of action on health policy development. Secondly, the feedback on quality of implementation from the technical unit of the Regional Office had been minimal. The EPR team at the Regional Office went through considerable re-structuring in early 2007, and this could have influenced the lack of feedback to the plan of action of the country teams. Thirdly, the impact of the assessment in future plans is limited, since the plan of action is identified well before the assessment of the previous plan of action takes place.

Tools to assess the plan of action. The activity management system is used mostly by administrators or budget holders. Technicians consider this tool a bureaucratic requirement, although in Nepal they used it more comprehensively with the support of other integrating systems and a monitoring and evaluation group. Staff in both countries recognise its utility to follow-up the implementation of activities with the MOH. They had high expectations for the global management system that WHO plans to roll out in 2008-2009 to address –among others- the lack of integration of financial and administrative information, and technical reporting.

6.4.3 How routine performance assessment systems affect plans of action

The mid term performance is the first formal feedback loop of the biennial plan of action. The EPR mid term performance assessment in Nepal focuses on technical and policy issues, while in Myanmar it focuses on administrative issues. This can be partially explained by the difference in working relations between WHO and the MOH in both countries, and by the modality of delivery of WHO support.

The experiences of Nepal and Myanmar indicate that performance assessment systems affected the country operations. However, this effect was selective about the level of its influence within WHO, and the number of stakeholders that it could influence in the period considered. For example, most of the administrative issues raised were dealt with, and the requests for technical assistance were delivered in the next plan of action. Therefore, we can infer that collaboration ran more smoothly and that specific technical issues were addressed conveniently. However, at policy level, the linkage is unclear, although it is not possible to discard the effect of the performance assessments on policy change. The research provides an example whereby "the lack of recognised managerial and core functions at the various levels of the public health system" was identified as the major key constraint to developing an efficient surveillance system during the assessment of the 2004-2005 plan of action for EPR in Nepal. This report made three recommendations that made their way through to the 2006-2007 plan of action. In particular, this plan included developing a framework for the integrated surveillance system; to strengthen the public health laboratory network; and to establish in-service training in basic field epidemiology. However, the mid term assessment report of December 2006 and the end of biennium of 2007 noted that the lab network planned activities had been reprogrammed to activities related to pandemic influenza. The reports also noted that despite efforts with the in-service training in basic epidemiology, there had been no progress due to the extensive amount of resources required. The situation in Myanmar was similar, and the regional office cleared a proposal from the WHO country team for shorter in service training in field epidemiology.

The assessments of the plan of action in both countries refer to pandemic influenza as constituting an opportunity to mobilise programmatic attention and further resources for EPR. Both countries mention having succeeded with the training of Rapid Response Teams. They also refer to the IHR framework and recognise the need to work with other countries and border areas on EPR issues. They recognise that there is a need to work with regional initiatives and networks to harmonise procedures, although there is no specific mention to the WHO Asian Pacific Strategy on Emerging Diseases.

The above illustrate how some of the issues raised through the performance assessment are explanatory of the progress achieved in the past year, rather than mere requests for subsequent action. Nevertheless, raising these issues is important because they contribute to broad policy discussions that influence future global (DaSilva and Iaccarino 1999; Calain 2007; Calain 2007) and regional initiatives (WHO 2005; WHO-Nepal 2007).

6.4.4 What happens to deviations from the plan of action

The mid term assessment noted changes in the plan of action in both countries, where planned activities were cancelled and instead, pandemic influenza preparedness and response activities took precedent. In this case, the performance assessment validated a change that had happened throughout the biennium[40].

The plan of action implemented in 2006-2007 included all activities related to pandemic influenza that had emerged after the plan of action had been identified. In both countries, there were additional activities implemented and the resources mobilised that constituted a separate plan, although related to the area of work of EPR. As a result, the end of biennium assessment of 2006-2007 included remarks and recommended actions that go over the scope of the initial plan of action. This was because no additional components to the plan of action were acceptable to the system after the approval of the plan of action at the beginning of the biennium in January 2006.

6.5 Major events, results, and appreciation of WHO contribution

This section presents the reasons that make *events* important and the meaning of "results" in addressing them. It then deals with the contribution from WHO to the achievements in addressing the major events through what WHO added, and through what would be lacking if WHO were not in these countries.

6.5.1 Why major infectious events matter

Interviewees from both countries used the number of people affected as a variable to categorize events of infectious diseases and outbreaks as important. They clearly distinguished between "peak incidence" referring to epidemic events, and "disease burden" to what they referred as "slow epidemics" or diseases that have high endemicity. The notion of hazard was considered important and linked to transboundary spread of a disease that poses a risk to the community.

The risk was the expression of the vulnerability of the community, either because it was non-immune, or else because it lacked appropriate mitigation strategies. Having laboratory

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[40] Reprogramming activities within an area of work can be arranged between MOH and WHO Country team.

confirmation of a disease in the community for the first time was considered important. In Nepal, interviewees referred to some infectious diseases as important in terms of social justice.

Interviewees considered that the lack of evidence that resulted from deficient surveillance systems was significant because it challenged appropriate prevention or control measures. This lack of evidence was associated with government (non)disclosure of infectious diseases. Some events were considered significant because they led to positive action by using a) epidemiology to uncover un-hygienic conditions in politically sensitive settings, b) evaluation to uncover deficiencies in national control programs, and c) health programs during civil conflict.

These findings are similar to those reported in the literature and relate to the perception and management of risks associated with infectious disease outbreaks of significant importance (Smith 2006; Flynn and Lenaghan 2007).

6.5.2 Meaning of "results" in addressing major events

In both countries the views on what constitute "results" did not have a uniform construction among interviewees, and were grouped into three categories for the purpose of the discussion:

a. Final outcomes. Interviewees referred to *results* as doing what was necessary in public health terms to control the situation and *take the problem away*. This translated in avoiding panic among the general public and having less disease. Controlling major events overrode individual interests to protect the group from the hazard.

b. Process quality. *Results* expressed adherence to a pre-established quality standard in terms of institutional mandate, programmatic rules, or stakeholders' governance.

c. Means to achieve other things. Addressing the major events legitimised the government through their transparent and timely action. It led to inclusiveness of other stakeholders as well. Addressing the events presented positive externalities that led to programmatic improvement, uncovering new diseases, or improving future responses.

The construction of national legitimacy through appropriate epidemic response has been reported (Lai, Lentz et al. 2004; Parkhurst 2005; Upshur 2005; Flynn and Lenaghan 2007) in similar terms as those referred to by the interviewees from both countries.

The lack of achievement of results in addressing the events related to several types of challenges similar in both countries. Firstly, these included poor socio-economic conditions, and traditions and cultural factors that delay the diseased people from seeking health care. Secondly, deficient responses related to efforts that were insufficient, lacked quality, or were not fully relevant to the epidemic control needs. Finally failing to address the situation was the expression of differences in approach to the problem by stakeholders and their roles.

The lack of achievement of results also reflected lessons learned that served to improve future situations because the uncovering of a problem permitted addressing it, or because a novel situation was identified that required new coping mechanisms (Garoon and Duggan 2008).

6.5.3 Appreciation of WHO contribution to EPR

The stakeholders of both countries had consistent views on the most important contribution from the WHO to the achievements that the countries had had in addressing the major events. Most interviewees acknowledged its technical assistance, capacity building, partnership development, and resource mobilisation. There was little mention of WHO contributing to evidence-based policies, research agenda or health analysis/ trends. In addition, interviewees acknowledged WHO financial assistance, considering it critical to strengthen the operational capacity of the MOH especially in cases of epidemics.

At present, there is no guidance to the balance of the core functions that WHO should have in EPR at country level, where each country team makes a decision in the absence of strong support from the regional office. Generally, WHO assumes more of an implementer role in countries with fewer capacities, than in more developed ones, where it remains a policy adviser.

The stakeholders also valued the presence of WHO because of its long country presence, its accompanying of day-to-day policy processes, and its responsiveness to the MOH needs. Some international stakeholders contested the contribution of WHO, because they perceived its technical neutrality to be compromised, or because it lacked transparency –among others- when adjudicating training opportunities.

The stakeholders concurred that if WHO were not supporting EPR, there would be less technical assistance and response to outbreaks would be more deficient. There would be fewer

resources available and fewer partnerships, because the trust from partners would decrease. The consequences would range from relative disruption of the capacity of the country to deal with major events, to a disastrous situation. At the same time, some national stakeholders from both countries considered that this would force the MOH to assume its governance differently, as a matter of sovereignty and government duty. The predominant view was that if WHO were not present, dialogue with other partners in the country, as well as links with the international community would become more difficult. To some NGOs, the absence of WHO "would not matter much" because they hardly work together, or because they consider WHO's technical support compromised.

The opinions of the different groups of stakeholders interviewed reflected a different degree of cohesion among themselves. Stakeholders held a more antagonistic position among themselves in Myanmar than in Nepal, where networks and dialogue among partners came across as being more functional. As a result, WHO shaped differently and was more critical for dialogue between the government and other stakeholders in Myanmar.

The findings uncover the value that stakeholders attach to WHO in EPR not because of what it does, but because of what it represents to them. Therefore, through this research and by asking specifically *"What would happen if WHO were not supporting EPR in this country?"* WHO is placed as part of a development network rather than being a single provider of assistance.

6.6 Suitability of logical framework approaches to assessing core work of WHO in EPR

6.6.1 Capacity building

The core work of WHO in EPR is to build national capacities to prepare for and respond to major events and epidemics. Sustainable national capacities include both protecting the populations against the spread of epidemics, and abiding to the principles of the IHR.

Capacity building is an elusive term used widely to mean a range of activities, such as training, or organizational change. Kaplan proposes a new approach to capacity building by analysing the tangible elements of organizational life (acquisition of skills, financial resources) and the

intangible (conceptual framework, organizational attitude, vision and strategy, and organisational structure). He argues that most organizations working on capacity building focus on the tangible elements because they need to show measurable results, deliver support in a traditional way, or consider discrete timeframes and processes. Nevertheless, he argues, there is no organizational change unless support for the intangible elements is provided too (Kaplan 2000). From the traditional approach, organizations supporting capacity building provide training and advice as a request for resources, when indeed, what is needed is self-understanding and facilitation. If we accept the concept of capacity building based on organisational life, then the performance assessment tools need to evaluate the role that organizations play as agents fostering change in the recipient institution (Hailey and Sorgenfrei 2003). Tangible and intangible elements depend on the precision in measurement of results, thus, on the appropriateness of indicators that the logframes use. However, while the precise indicators will improve the measurement of performance (Lavergne and Branch 2002), there will still be a call for approaches to assess support to tangible and intangible elements, and for the combination of logframes with process-oriented analysis.

The findings of the research reflect well the above views. The differentiation between tangible and intangible elements is convenient to discuss the suitability of the current logframe approaches as a management tool for EPR in countries. It relates to the dominant characteristic of two distinct processes:

a. Complication. It represents interventions with multiple components, multiple agencies, multiple simultaneous causal strands and/or multiple alternative causal strands (Rogers, 2008). The response to major events or epidemics illustrates these interventions. When the country health authorities declare a major event, multiple partners collaborate in performing multiple tasks. In such cases the roles of stakeholders are well defined. Responses to major events *constitute* discrete units where stakeholders contribute to the various areas through the *ad hoc* established committees. Assessing the event through logical framework approaches is useful, especially, when the focus of attention is the event itself, rather than a stakeholder contribution to addressing it.

The pandemic influenza preparedness plan that was prepared in 2006 in response to the avian influenza threat in Myanmar illustrates how a complicated intervention can be assessed. In this plan the roles of the stakeholders were clearly defined, and the plan document stated that the achievement of results was only possible if all stakeholders

contributed as planned. This implied that the success of the intervention consisted of multiple simultaneous and/or alternative stands, part of the same event.

b. Complexity. It represents interventions with recursive causality (with reinforcing loops), disproportionate relationships (where at critical levels, a small change can make a big difference - a `tipping point') and emergent outcomes (Rogers, 2008). Strengthening the national capacity for IHR (2005) falls into this category of support, because it entails support to policy development through roles that cannot be defined in advance. This constitutes the WHO core presence that translates into -among others- advocacy, leadership, and continuous technical assistance. A considerable proportion of WHO's support in EPR fell into what interviewees referred to as the "being there" that contributes to building national capacity, and that corresponds to the intangible elements that Kaplan mentioned.

The notions of complication and complexity also came across when the interviewees referred to what results in addressing the major events meant. On the one hand, achieving programmatic targets of vaccine coverage or reducing mortality illustrated "results" as complicated interventions. On the other hand, the interviewees referred to "results" as the means to achieve other things, alluding to the emergence of positive externalities. For example, they mentioned the credibility and legitimacy that a government acquires when it deals with information on epidemics in a timely manner; or the social justice gains that derive from addressing major events and epidemics appropriately. In this case, "results" express outcomes related to complex interventions.

6.6.2 Core presence

The logframes that WHO used did not assess the contribution of WHO's core presence to the achievement of "results" in EPR adequately. Firstly, the rationalisation and the standardization inherent to the logframes were not suitable for assessing complex interventions, such as health policy development. Secondly, logframes turned out to be inappropriate for assessing complex functions, such as advocacy or leadership because it was difficult to include these "soft" components in the logframes used. Thirdly, some EPR interventions did not respect the time boundaries of planning and project cycle[41].

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[41] For example, building the national capacities in field epidemiology through the establishment of sustainable national programmes in Myanmar and in Nepal is taking several WHO planning cycles. As a result, a new

Other service organizations are confronted with similar challenges when implementing logframes for their management (Dearden and Kowalski 2003; Hailey and Sorgenfrei 2003). The main criticism of results-based management is not so much about the concept, but in the rigidly imposed application throughout the organisation as a way to satisfy the need for information of all stakeholders, and the quality of indicators (Radin 1998; Kothari 2000; Bakewell and Garbutt 2005; Davies 2005).

There are some experiences in assessing organizational systemic issues in country-programmes using complementary approaches to logframes. Most of these approaches are inclusive and participatory, such as the matrix scoring, and although their generalizability is limited, they are valuable tools in specific settings, thus their usefulness (Maxwell 1997). Stakeholders have enquired about the performance of multilateral organizations either because they want to develop benchmarking that will allow comparisons, or to guide their decisions on support. In 2003 a group of like-minded donors looked at the performance of several multilateral organizations with regards to selected functions (Selbervik and Jerve 2004). These functions included the contribution from multilateral organizations to policy-making, to the enhancement of national and local capacity, to promotion of collaborative processes, and to information sharing. These functions coincide with what the interviewees from all stakeholders groups in Myanmar and Nepal valued as "important" with respect to WHO country work.

6.6.3 Advocacy

Advocacy and leadership are two functions difficult to assess through the current systems and tools. However, they are critical for WHO support to EPR. Most of the frustrations of the WHO staff when using the tools and systems to assess the EPR performance related to their inability to assess their work in advocacy and leadership.

Advocacy is one function in which there is a recognised need to assess its impact and towards which different approaches are being developed and reviewed (Chapman, Wameyo et al. 2001). Assessing advocacy work through logical framework approaches presents pitfalls because advocacy is messy, it relies on collaborative networks, and the timescales are long (Coates and

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concept of field epidemiology training is being developed, to address emergent needs such as pandemic influenza, the decentralisation of the health sector takes place in the two countries, or the implementation of such projects in resource-poor environments.

David 2002; Kelly 2002). For example, USAID assesses progress on its advocacy work in countries through the so-called "Advocacy Index". The Advocacy Index is composed of several elements that need to be present in advocacy work, although none of them is sufficient to achieve results. A review found that operationalising this index in a country was labour intensive, but worthwhile because it served to manage the project internally; and that assessing the effectiveness of the process will "take some years" (Hirschmann 2002; Kelly 2002).

6.6.4 Attribution

The fact that WHO does not implement programmes directly, but supports national programmes, constitutes another organizational challenge when setting performance expectations for outcomes at two levels. Firstly, it relates to accountability for outcomes, and the emerging concept that what matters is not achieving outcomes *per se*, but rather, having influenced the achievement of outcomes (Davies 2004; Mayne 2007). Secondly, setting performance expectations for outcomes relates to the technical challenge of attributing results of national programmes progress to the stakeholders' contributions (Radin 1998; Mayne 2007).

Attribution did not come across as critical to any stakeholder in the countries studied. Instead, the interviewees commented on several reasons that make the link between the contribution of WHO and the results cumbersome[42], and stressed WHO's importance in accompanying processes and "contributing towards" results. This remark came as a surprise, since the research had assumed that assessing the attribution of results to WHO was critical. However, the findings confirm the current shift in "causation away from proving relationships between variables, towards reducing uncertainty about how things relate and change", illustrating well the "plausible association" concept (White 2002; Iverson 2003). The priority becomes then the process that creates the conditions for the achievement of outcomes, with the implicit recognition of it being a complex rather than a complicated process.

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[42] Including that a) WHO would need to differentiate the technical accountability that stays with MOH, from the financial accountability that WHO would retain; b) WHO funding, in particular if institutions second staff that remain "staff of the seconding institution based in WHO"; c) If the number of partners increases, interaction among them becomes complex, and assessing attribution gets more complicated,; d) Attribution becomes difficult for functions that depend on complex processes not linked to a budget; and e) There are technical difficulties in assessing *"what would happen if"* in EPR because its effectiveness will mitigate the hazard. Therefore, there are no obvious counter-factual or experiments to compare experiences.

The interviewees from all stakeholders' groups in the two countries studied assigned more importance to assessing multidirectional processes rather than single-focus organization performance. From this perspective, organizational issues related to being part of a network, and performance depended on the stakeholders' control span (Johnson, Scholes et al. 2006). Uusikyla and Valovirta propose looking at each organization as part of a network that contributes to collective goals. At output level, the contributions from a single organization are relevant to the managerial accountability perspective. However, assessing impact and overall effectiveness needs to shift from a single-organization perspective towards a multi-organizational setting. They propose looking at the internal enabling factors as the intangible assets within the organization inherent to its core value (Kaplan 2000; Hailey and Sorgenfrei 2003) as the first sphere of governance. The internal enabling factors relate to internal accountability within the organization, and include areas such as leadership, people, policy and strategy, partnerships and resources, and processes. The second sphere relates to performance measurement against the planned outputs delivered to *direct customers*. The third sphere relates to multi-organizational effectiveness, that places a single organization as an agent of change within a network (Davies 2005; Uusikyla and Valovirta 2007). The three spheres governance builds on the Balanced Scorecard's quality management approach for a single organization (Kaplan and Norton 2005) emphasizing the work within a network. The usefulness of looking at these three different spheres of governance in the case of the present research resides in the value that it attaches to the internal enabling factors, and to the capacity to deliver programmes within networks.

6.7 Compatibility of programmatic needs and results-based management approach

The formal assessment of the EPR programme within the WHO plan of action in both countries did not reflect the investment of the Organization accurately. On the one hand, the consultation process and clearances needed during the planning cycle require that the components of the plan of action at activity level be decided several months before the start of the biennium. This requirement is problematic because the epidemic response component of the EPR programme implies dealing with unexpected situations, and this is not fully compatible with logical framework approaches. On the other hand, the current computerized monitoring system of the results-based management framework does not allow additions to the plan of action after approval easily. The investment was under-registered because not all the resources that were

mobilised during the biennium were integrated in the results-based management framework. As a result, in the case of EPR, the lack of flexibility of the tools represented a major challenge to the WHO staff interviewed.

The lack of standardization of the roles of WHO in the area of EPR at country level exacerbated the problem. For example, several strategic activities in the plan of action of EPR in both countries were re-programmed in the mid-term review due to immediate needs on epidemic responses. In some cases, these activities were only re-scheduled and delayed, although in other cases the mid-term strategic activities were cancelled. The substitution of medium term strategic actions (important) by others responding to immediate needs (urgent) raises three main questions. Firstly, it is not clear that substituting strategic actions by immediate ad hoc support is effective in the long term. An example could be postponing the establishment of field epidemiology training (Myanmar, Nepal), or the strengthening of a network of public health laboratory services (Nepal) because funds were immediately needed for outbreak responses. This results in confusion in the meaning of importance and urgency in the allocation of priorities. At times, it is understandable how difficult it is for the WHO country representative to refuse an urgent request from the government. However, while this can be fully justified on an exceptional basis, it endangers the management by results approach by becoming a management by crisis approach. The concentration on short term issues to the detriment of long term considerations is termed as "myopia" and is recognised as an enemy of virtuous performance management (Goddard, Mannion et al. 2000; Smith and Goddard 2002). From an organizational perspective, there is a need to discuss the ability of WHO country representatives and the support that the regional office can provide to protect the medium and long term strategic agendas in EPR that urgent requests from the government can endanger.

Secondly, the assessment of the EPR plan of action in both countries focused on the resources directly invested through the WHO country office. However, it failed to account for the resources from WHO regional and subregional levels for the plans of action of 2004-2005 and 2006-2007. In both countries this investment had been considerable in terms of budget (financial and operational support for outbreak responses) as well as technical assistance (assessment of needs, high level expertise for specific outbreaks, advocacy and leadership for the implementation of IHR(2005)). Consequently, there could be a discrepancy in the case that cost-effectiveness of WHO support in EPR were analysed, misleading the management by results. This incorrect inference about performance brought about by the difficulty of

accounting for the full range of potential influences on a performance measurement is termed as "misinterpretation", and is recognised to be another enemy of virtuous performance management (Goddard, Mannion et al. 2000; Smith and Goddard 2002). The findings reflect two technical challenges in results-based management, in particular, linking financial and performance information, and ensuring quality of data and information (Mayne 2007).

Thirdly, there is no approach to analysing the cost-benefit of the WHO collaborative arrangements in EPR across all countries in the region. The WHO staff in both countries expressed the convenience of having such an analysis, that would foster WHO institutional learning. Although benchmarking does not identify the reasons for good or poor performance (Johnson, Scholes et al. 2006), it would encourage further analysis of managers and help EPR programme support across countries. For example, by analysing the cost-benefit of supporting the production of global public goods through disease surveillance (Smith, Woodward et al. 2004), or benchmarking a series of process indicators (Reintjes, Thelen et al. 2007).

There have been other programmes in WHO that have in-built programmatic benchmarking to provide internal assurance of quality support by WHO. This has proven beneficial, in particular to those programs that depend on WHO extra-budgetary funds. Most of these programs are part of global partnerships and have national coordination mechanisms and transparent governance mechanisms that include periodical external evaluations. Emergency operations that respond to a global appeal have in-built benchmarking as part of donor requirements as well. In all these cases, the use of logframes has become a routine not only in the planning phase, but also for management and reporting. All these programmes share common characteristics of being centred in the national programme, having agreed strategies and governance mechanisms, and clearly assigned roles for stakeholders. All these are factors that a review carried out on the use of logframes in external country support found as facilitating the use of this approach (Gasper 2000; Bryce and Victora 2005).

In the current research, most of the interviewees expressed support for joint reviews/ external evaluations of national programmes as an option for the EPR programme to complement the routine tools in use. These reviews would help focus the attention to the "client", facilitating a management by results focused on the national program, rather that at each of the stakeholders. In addition, the stakeholders recognised the positive externalities that evaluating outbreak interventions jointly had produced among those local staff who had participated along international experts.

6.8 Unintended consequences of the logical framework approaches

Because in practice what is measured or evaluated is what is being followed up and encouraged (Kaplan and Norton 1992; Patton 1999), WHO staff were concerned that the systems and tools did not reflect what it takes to deliver support in the area of EPR accurately. They felt that the systems and tools used routinely could not assess things that mattered to them. These things ranged from excellence in individual performance, to lobbying and brokerage with partners for the MOH, or leadership and placing issues in the national political agenda. In addition, the WHO staff felt that the logframes required succinct phrases and short statements that gradually drove them away from reporting what mattered to them and on the problems or difficulties that they encountered. Some staff felt difficult to reconcile their *political correctness* with their *professional stand*, and became frustrated and lost enthusiasm in their work. Increasingly the staff saw these logframes as a requirement for financial accountability, and delegated their use to the administrative staff.

The findings of the research illustrate the double and conflicting demand of the logframes used in results-based management (Kothari 2000; Hailey and Sorgenfrei 2003; Davies 2004). On the one hand, logframes compel reducing the information requirements, suggesting that everything will go according to plan (Radin 1998; Dearden and Kowalski 2003; Earle 2003). This lack of record of the influence of external factors on project work distorts the reality, and the oversimplification of terms in the long-run goes against organizational learning (Perrin 1998; Binnendijk 2000; Mayne 2007). On the other hand, logframes need to describe what happened to the programmatic funds and what the programme achieved (Radin 1998; Dearden and Kowalski 2003; Bakewell and Garbutt 2005). Some authors recommend the modification of logframes to accommodate the needs of contextual and emergent factors (Kothari 2000; Lavergne and Branch 2002; Earle 2003). However, other authors suggest the combination of the logframe (administration, management) with more qualitative work, minimizing reporting for audit purposes (Goddard, Mannion et al. 1999; Patton 1999; Binnendijk 2000; Perrin 2006; Mayne 2007).

In both countries, the interviewees concurred with the usefulness of having assessment of results focused on the national processes and national programmes, rather than on the

contribution of individual agencies. In this sense, they saw a complementarity between two systems:

a) Logical framework approaches. This approach is needed from a financial accountability perspective and can focus on the chain input-process-output. These logical framework approaches are suitable for assessing the Organization's contribution in complicated processes from a single stakeholder perspective.

b) Network analysis approaches. This approach is needed from a programmatic perspective, and can focus on the chain process-outputs-outcomes (and impact). The network analysis should be focused on the client (MOH) perspective and would be suitable for approaching complex processes through well-structured reviews of the EPR national programme.

The two countries studied illustrated well the need to set realistic expectations for the role of performance information. While performance information was cast as the *panacea* that would allow its users immediate access to everything needed to manage, budget or hold to account, the practice is different (Mayne 2007). In reality, the expectations that the WHO technical assistance could be assessed rationally have been scaled down. As a result, staff use the logical framework approaches for certain parts of the programme. However, for the programmatic perspective that deals with EPR policy process, they suggested the need of other approaches to capture the differing perceptions of use and success among stakeholders. Perrin and others recommend combining logical framework approaches with in-depth programme reviews or evaluations to assess outcomes and impact issues and to understand better why things work or not (Binnendijk 2000; Kelly 2002; Perrin 2006).

The research findings uncovered inconsistency of the meaning of indicators in the logframes in the programme reviewed. WHO staff interviewed in both countries considered that the outcomes indicators used in the logframe did not measure the organizational performance, but rather pointed at progress of the national EPR, for which they were not accountable. White noted the same unsuitability when analysing the use of outcome indicators of a single organization as a vehicle to judge its performance towards the achievement of international development targets (White 2002).

7 Concluding remarks and Recommendations

This chapter starts with the presentation of the main concluding remarks with respect to the specific objectives of the research (see section 3.2, page 42 and Figure 7, page 58) and the framework used (Figure 4 and Figure 14, in pages 43 and 159). These concluding remarks contrast the research findings with the literature. Table 19 (page 160) recapitulates the chief remarks of the research by its specific objectives and with respect to the approach and methodology used, and how they contribute to organizational and scientific knowledge. The chapter continues with some recommendations formulated as options for further research. It follows with recommendations on what multilateral organizations could consider when using performance assessment tools to manage programmes by results at country level.

The research explored the utilization of logframes to assess the programmatic performance of a multilateral agency at country level in the context of results-based management. The research focused on two developing *"fragile states"* countries in Asia. Therefore, it recognises that the situation in other countries is likely to be considerably different. At the same time, having two case studies increases the robustness of the results. It also acknowledges that the study focused on a multilateral specialised agency of the United Nations, and that therefore, the situation is likely to differ from other agencies working at country level. Similar caution applies to the fact that the characteristics (including its national governance) of the technical programme studied may not be representative of other public health programmes.

The main findings from the study were twofold. On the one hand, the research found factors that affect the programme delivery and how country teams deal with them from the perspective of results-based management. These included contextual factors, stakeholders' relations, and the agency's country organizational profile. On the other hand, the research identified factors related to the suitability and compatibility of these tools to assess WHO support to EPR.

The methodology that this research used complemented the information that the routine assessment provided on WHO performance in EPR. For example, it revealed the importance that stakeholders attach to infectious diseases, and their construction of what "results" in addressing them mean. In particular, the meaning of "results" in terms of positive externalities and public goods invites WHO to foster cooperation among stakeholders within a network

rather than from a single agency perspective. The research also provided information on the stakeholders' appreciation of WHO contribution, in particular of its core presence as a valuable asset. The clustering of findings around the core themes selected (Figure 6, page 55) was convenient for explaining the facilitators and challenges of WHO support to EPR in both countries; and to identify country and corporate issues that WHO can address in the future.

7.1 On the advantages and challenges of the tools and systems used

The findings of this research reflect an organizational transitional period in WHO, similar to other organizations, with an ongoing effort to link the perspectives from different groups within organizations (technicians and administrators) of what constitutes socially legitimate aspects of accountability and effective performance (Modell 2004).

The findings do not support that the tools and systems used by the WHO country teams to assess EPR programmatic performance contributed towards results-based management. The logframes were well accepted and useful for programme planning and for financial accountability purposes. However, they presented limitations for effective programme management and organizational enhancement similar to those that have been reported elsewhere (Wholey 2003; UN 2008). This was due to a) limited flexibility of the logframes to rapidly evolving programmatic needs of EPR; b) focus towards financial management by source of funding that was not representative of the overall WHO investment in EPR; and c) failure to acknowledge specific contextual and stakeholders' factors related to implementation of EPR, or for support from other levels of WHO to the country's EPR plan of action. The limited knowledge and motivation of technical staff to use these tools diminished their enthusiasm and interest. As a result, they delegated the use of logframes to administrative staff, who used them mostly for financial accountability purposes.

The research found a rational/technocratic influence for the adoption of results-based management as an internal organization-wide and top-down requirement. The research also found a) rational/technocratic influence for the implementation of results-based management in programmes funded through extra-budgetary resources; and b) political/cultural influence as governance of externally funded programmes through external interest groups at country level. Both influences were illustrated by well resourced vertical programmes, including that on pandemic influenza preparedness (de Lancer Julnes and Holzer 2001)

Figure 14. Framework used and research results from case studies

	PLAN	ORGANISE	IMPLEMENT	REPORT / MONITOR

Inputs:
Country situation; Donors do not support MOH, Donors support regions directly; Partners; WHO Policy drivers; National EPR plan; Emergent need; Activities — MOH and/or Partners; WHO ad hoc support RegOff, Country, Headquart.; WHO funds and WHO country staff implement; MOH and/or Partners reporting; Ad hoc / routine monitoring: RegOffice &/or

Processes:
WHO team identifies Country Cooperation Strategy w/MOH; WHO Country team negotiates Plan of action on EPR w/ MOH & partners; WHO Regional Office approves Plan of action on EPR (with MOH); Country EPR focal point initiates action w/ MOH focal point; MOH requests support for activities within EPR plan of action; Country team processes request; WHO funds and MOH / partners implement; "No funds", WHO supports implementation; Results; Ad hoc plan of action WHO country reporting; EPR Plan of action implementation routine monitoring

Outputs/results:
Evidence of impact in admin issues. Limited impact on policy issues. Impact on long term.; WHO Country Plan of Action (Approved); Request to Regional Office/Headquarters for Technical; WHO reports on activities or plan of action; not contribution to national EPR. Deviation from plans is noted, not analysed or acted upon systematically.; MidTerm & End of Biennium reports for Plan of Action

Assumptions

PLAN	ORGANISE	IMPLEMENT
Public Health needs in EPR are properly identified. WHO Country Plan of Action is aligned to WHO corporate priorities. Coordination with partners is effective	WHO EPR plan of action is agreed and resources made available timely. Country conditions for implementation are present. Operational partner is available and capable	National EPR plan of action is implemented fully and timely. Contributions from partners (inc. WHO) are maximised. Population is protected from epidemics. Country systems/tools assess EPR performance accurately & precisely. WHO systems/tools assess its performance accurately & precisely

Anti-theory

PLAN	ORGANISE	IMPLEMENT
Asymmetric planning process. No proper consultation with MOH at appropriate levels. Insufficient inclusiveness of partners	Funds available for EPR plan are insufficient or tied for other purposes. Availability of operational partners is ineffective. Minimal local resources are not available. Priorities have shifted. Country conditions not conducive to EPR project implementation	Performance systems and tools do not capture critical processes. Utilization of systems and tools is not adequate. Contribution from partners is ill defined. EPR national results and partners' projects results are mixed. WHO experience in EPR do not influence future plans

Research results

PLAN	ORGANISE	IMPLEMENT
Public Health needs in EPR are properly identified. WHO Country Plan of Action is aligned to WHO corporate priorities. Sufficient inclusiveness of partners (Nepal/Yes; Myanmar/No). Asymmetric planning process (Regular Budget). No consideration of contextual & stakeholders factors. Plans EPR detailed too early in planning phase	WHO EPR plan of action is agreed and resources made available timely. Operational partner is available and capable (Myanmar/Yes; Nepal/No). Priorities have shifted. Country conditions not conducive to EPR project implementation	Population is protected from epidemics: ongoing progress. Performance systems/tools do not capture critical processes. Utilization of systems/tools is not adequate. Contribution from partners in logframes is ill defined. WHO experiences do not influence future (policy) plans. Limited organizational learning [No reporting of difficulties and No analysis of what does not work]. Logframes lack flexibility for rapid and frequent changes

Note: In blue, framework assumptions; in purple, anti-theory observed in WHO practice; in green, new observations of this research. Research results in grey background

Table 19. Recapitulative table with main concluding remarks and implications/ recommendations of the research

Specific objectives	Conclusions	Implications / Recommendations	
		Organizational	**Scientific (contribution to knowledge)**
Assess the comparative advantages and challenges of various assessment tools and systems that WHO uses to measure its performance in EPR at country level;	Performance assessment tools are useful for accountability purposes (MOH, WHO staff monitor $). However, they are not useful for results-based management (driven by resources; focus on implementation of outputs; limited analysis of impact). Current tools focus on achievements, disregarding contextual factors, challenges, and failures. Individual assessment: subjective and with limited internal validity; and reductionist. Plan of action/ logframes: concentrates on tangible (versus important) and regular budget (control span) and lacks feedback from regional office. Based on traditional approach to single provider of services (activities) rather than dynamic network facilitator (functions). Programmatic: focus on agency (inward) rather than in users (national EPR). Individual (training, attitude), office (leadership, setting), and organizational (culture, feedback) factors affect the use of performance assessment tools/systems.	Current systems fail to a) foster organizational learning; b) foster progressive organizational culture based on network theory; c) maximize organizational assets (core presence). WHO needs to act at individual, country, and corporate levels because a) Individual/country factors influence how tools and systems are used (leadership style of country representative, office setting, technical outlook of EPR team); and b) Corporate factors influence the use of tools (training of staff in results-based management, feedback from regional office, organizational culture). WHO needs to consider further attention to process analysis and shift performance assessment to the country's perspective.	Issues found are consistent with those reported in the literature. However, most of the literature reports on NGOs experiences. Therefore, the present the research adds evidence to the generalizability of the challenges of using logframes in different organizational settings.
Address the WHO contribution in terms of results and impact in the area studied; and	Current systems do not assess contribution towards results or impact and are focused on implementation of plan of action & financial accountability. WHO contribution concentrates on three core functions and there is no analysis on the balance of functions in EPR in countries. Stakeholders do not construe epidemic importance, success, and stakeholders' support uniformly. When considering stakeholders perspectives a) the paradigm of performance measurement shifts towards a holistic view of what major events are, and what results/lack of them mean; and b) the contribution of WHO to national EPR uncovers the value of its core presence. Logframes are useful for assessing complicate processes (epidemic responses), but not complex processes (EPR policy issues). Programmes governed at the users' end are suitable for logframes and results-based management (shared objectives, agreed indicators, transparent contribution from stakeholders, continuous dialogue). Attribution has little relevance to stakeholders and its assessment presents important challenges.	Technical factors in EPR (rapid changes, complex processes, and depending heavily on unplanned needs) challenge the use of logframes to assess programme performance. Current systems are not conducive to the production of public goods, since funds focus on epidemic responses rather than the development of surveillance systems. There is a lack of benchmarking indicators of the contribution of WHO to EPR to assess inter-country progress/ guide WHO support to countries. There is a need to consider the appropriate balance of core functions in support of EPR in countries, to protect important (medium term) plans from urgent action requests. WHO needs to consider its profile as a facilitator contributing towards results in national EPR within a network.	Findings support the reported overriding of stakeholders imposition of priorities on national and sectoral agendas. Findings add evidence to the reported view that support from international partners skews priorities towards short term action (epidemic responses) and towards specific diseases (rather than surveillance systems). Findings do not support the evidence of systematic free-riding practice of countries when dealing with emerging infections. There is a need to explore and report the positive externalities of responses to major events in countries. There is a need to explore the effects that current EPR donor practices (coordination platforms, outsourcing to NGOs, direct regional support) have on the sustainable development of public health systems.
Propose options for addressing WHO accountability performance and cooperation effectiveness	There is preference for a combination of logframes with evaluation/review of national EPR rather than expanding logframes. There is need to identify indicators based on the organizational assets (core presence), means (inputs), contribution (functions), and results (programme).	WHO needs to analyse the factors conducive to adherence to results-based management/ appropriate use of tools for EPR across countries and to promote them. EPR programme needs to learn from the practices of other programmes on the use of tools to assess performance around national programmes. WHO needs to consider joint programme reviews in the context of regional/ global initiatives related to EPR in complement of current routine performance assessment.	
Approach and methodology	The case studies complemented the information that the routine performance assessment provide and that is important for management of EPR support/ country teams. The case studies showed different constructions of events, "results"/"failure" that can guide future WHO support in EPR. Framework approach used allowed analysis by elements and managerial functions. Case studies confirmed assumptions of the framework, elements of its anti-theory; and new elements that need to be integrated in the framework. Present research identified further areas of applied research on EPR, on logframes use, and on institutional development. Utilization of schematic representations was useful in all research phases (dialogue, focus, clarification)	This research has illustrated the importance of combining different approaches to assess programmatic performance, and of including the views from stakeholders. The use of logframes is a component of the results-based management approach. WHO needs to consider corporate action because of the influence that the organizational profiles have on the use of logframes and the understanding of results-based management. Thus the need to streamline recruitments and appraisal procedures, ensure continuous training of staff, and feedback appropriately to the country teams.	The research adds evidence to existing gap between the adoption of results-based management at global level and its implementation in countries. The research identified specific challenges of using logframes at several levels (e.g. complicated/complex processes of a technical programme; different development functions). The research adds to knowledge through the identification of issues that can guide further organizational action, such as the influence that the budgetary structure has for programmatic results-based management; or the different meanings that "results" have for stakeholders.

Finally, the research also found that the organization culture, including its limited risk-taking behaviour and innovation attitude, acted as a political/cultural influence that limited programme enhancement. For example, by failing to recognise the contextual challenges or the causes of non-achievements of results, the organization misses opportunities for learning and for mobilizing additional support. There was a felt need for corporate attention across WHO to a) developing a learning culture across the organization that values successes and failures to enhance professional excellence and improve its performance; and b) recognising that there are initiatives where results from investments do not surface for years and valuable process activities that are independent from time-bound substantive outcomes.

The case studies have illustrated most of the organizational and technical challenges identified when implementing results-based management (Radin 1998; Binnendijk 2000; Perrin 2006; Mayne 2007; UNDP 2007; UN 2008) or specifically using logframes (Dearden and Kowalski 2003). Ireland et al. reviewed the experience of donors in assessing their country-level performance, by looking at plans' ownership; decentralization and leadership; accountability; and learning and complexity. In their review, they noted similar issues to those found in the current research, in particular, tensions in addressing the asymmetry in the planning process, and in the relations between accountability and learning in performance assessment. As well as other authors, they also noted little analysis on the assessment process that would provide an opportunity for organizational learning, and insufficient corporate emphasis on the importance of assessing performance from the country's perspective (Davies 2005; Uusikyla and Valovirta 2007). They note that evaluating performance could be tackled at the client, organisational, and systemic level (Ireland, McGregor et al. 2003). They also point out the focus of performance assessment shifting from "aid" to "development" assessment to which others add further evidence (Evans and Booth 2006).

The research validated the observations of literature (Chapter 2) about the high credibility that WHO has at country level, and on the influence that extra-budgetary resources have in the definition of the priorities of WHO's plan of action in countries. The findings add to the evidence on the importance that organizational culture[43] (Johnson, Scholes et al. 2006) has in the context of results-based management. In particular, the findings highlight the individual profile and leadership style of the WHO country representative and the need to strengthen the supervisory and support roles of the Regional Office.

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[43] A cultural web including, among others, power structures, organisational structures, and control systems.

7.2 On the assessment of contribution to results and impact

The case research methodology provided useful information about the programmatic support that WHO provided in the countries studied. It served to profile WHO as part of a stakeholders network and its contribution to the various meanings that "results" in EPR have, including positive externalities and public goods.

The current research uncovered that the core budget of WHO for EPR is seriously limited, and it depends heavily on *ad-hoc* extrabudgetary resources, where the funds are earmarked for specific purposes. Critical areas, such as disease surveillance or the development of public health laboratories services remained un-attended while funds flew for epidemic responses. This led to an inward-looking management by resources, rather than by results.

The research found that logframes were useful for accountability and for the management of complicated processes, such as epidemic responses. However, there was a felt need for other assessment approaches in the case of complex processes such as the adoption of a policy on epidemic preparedness or surveillance, or the strengthening of capacities to implement the IHR(2005). Logframes failed to assess complex functions, such as advocacy, leadership, or capacity building as well. The logframes distorted the assessment towards what is measurable, rather than focusing on what the teams considered important.

The findings of this research signal some of the limitations and possibilities associated with the use of logframes in addressing attribution in relation to WHO work and the expectations that stakeholders have. Assessing performance and attribution has evolved from more management-oriented methods towards more qualitative-anthropological models. In this sense, country stakeholders expect a WHO that is an agent for change in governance, institutional learning, and participation and empowerment within a network structure, rather than a provider of unilateral support. From this perspective, there is a shift from "results-based" towards "results-oriented" management (Patton 1999) that makes it necessary to use logframes in conjunction with more qualitative approaches (Goddard, Mannion et al. 1999), such as case-oriented studies (Iverson 2003) centred in the national programme, rather than in a single stakeholder.

The use of logframes for the management of rapidly changing programmes presented limitations. In the countries studied, this was partly because the logframes only included the

resources from the WHO Country level rather than all support from other levels of the Organization, in particular for epidemic responses. However, the logframes could not reflect these many changes fully. The reprogramming of activities led to a crisis-based management for certain activities, with no further analysis of its consequences in the medium term. In addition, there is no standardization of the roles of WHO in the area of EPR at country level, and therefore, there is no approach to analysing the cost-benefit of the WHO collaborative arrangements in EPR across all countries in the region. Such analysis could raise critical issues, such as the production of global public goods through disease surveillance, production of positive externalities through epidemic responses, or benchmarking a series of process indicators for future programmatic guidance across countries.

The case studies validated some of the assumptions of the framework used in this research. In addition, the case studies found support for the anti-theory considered with regards to all four functions, and identified new elements of interest. Figure 14 in page 159 illustrates the results, how they conformed with the framework used (assumptions in blue colour font; and elements of the anti-theory in red colour font), and some new elements that the framework had not considered (in green colour font). In particular, findings support that the planning process is not fully symmetric, that there is insufficient inclusiveness of partners (in one country), and insufficient consideration of contextual factors. With regards to organising, the findings support timely provision of resources, but faced shifting of priorities and difficult country conditions that challenged the plan of action. The changes in the plan of action influenced its implementation that addressed urgent needs, and in particular epidemic responses. Reporting and monitoring supported mostly the anti-theory from a results-based management perspective, with tools that did not capture the contribution of the teams, with little analysis of failures, and insufficient effect on future plans of action.

7.3 On ways to move towards results-oriented enhancement

The organizational implications of the research are twofold. On the one hand the organisational culture of WHO in countries influenced how country teams used the tools and systems to assess performance. This related to the technical capacity of the EPR team, and to the leadership and supervision from the country representative and from the regional office. On the other hand, the appropriate use of systems and tools related to having a learning culture across the organization

that values successes and failures as means to improve its performance, and makes staff comfortable to take reasonable, well-informed risks. Moreover, there were implications due to the gap between the adoption of results-based management at headquarters and regional level, and their implementation by the country teams.

On the basis of the above, the research recommends consideration of in depth analysis of the factors conducive to promoting the adherence of country teams to results-based management approaches and use of logframes and to those barriers at country and regional levels, and to use them for organizational learning (Crossan, Lane et al. 1999). The research also signals the need to analyse the components of results-based management that are lagging in other countries, to identify the measures that need corporative implementation.

The research's policy implications with regards to EPR were that, at present the programme cannot be managed by results for two reasons. Firstly, it lacks a) the minimum up-front core funding required at country level, b) the baselines and indicators to assess WHO performance by functions, and c) the means to compare the performance of WHO country teams in EPR in the light of the IHR and regional initiatives. Secondly, this is because the logframes are suitable for linear processes, while in the case of EPR, assessing performance requires tools in terms of both complication and complexity.

On the basis of the above, the research recommends the identification of appropriate measures and indicators on EPR progress applicable consistently across countries to enhance its assessment and communication of results. There is a need to a) combine logframes with a more holistic approach to programme performance; b) consider the critical elements of the planning, implementation, review and reporting cycles of EPR programmes, and c) re-align them to the specific country contexts. The evidence from the two countries studied reveals a preference for combining the logframe with in-depth evaluations of the national EPR programme, rather than adapting the logframe to suit complex processes' needs. The basis for this preference is having a realistic alternative in the short-medium term, while awaiting the development of indicators to assess the intangible elements of WHO support to EPR at country level.

The research contributed to the technical debate concerning tensions between global and local initiatives for surveillance of infectious diseases. In particular, the findings supported the literature concerning the over-riding of national priorities by global initiatives and by donor

priorities towards specific diseases. Moreover, the findings of the research show concern over the effect that national coordination platforms had on the systematic component of EPR in one of the countries studied. There was also concern about the mechanisms of assistance delivery that donors promoted in these two "fragile states", and the sustainability and governance of their national programmes. On the contrary, the findings did not support the evidence of systematic free riding with respect to disease surveillance, although in one of the countries studied it occurred for some epidemics, where the government felt at risk of criticism. The study found that increasingly the MOH declared the epidemics and considered a positive result to abide by international quality standards.

The above signals the interest of further research to explore and document the positive externalities of EPR and the interest to promote their systematic production across countries and stakeholders. Other areas where research is needed include the effects that the operationalization of global initiatives have on the definition of national priorities; the effects that the current mechanisms of delivering external assistance have on national governance and the fragmentation of the public health systems; and the sustainability and impact of health programmes heavily supported by external funds (Aldis 2008). Finally, the research identified the need to explore the organizational consequences of substituting support to strategic policy development with support to urgent needs for epidemic support in the long term. Fostering such research would allow WHO to seek higher influence in the global agenda and identify strategies to address the gaps between global declarations and local implementation of EPR related initiatives.

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Annexes

Annex 1. Definitions and concepts

Accountability: "An obligation or willingness to be assessed on the basis of appropriate measures of actions and outcomes with regard to the achievement of programme or policy purposes" (MH1406, JCAHO), or "the obligation to demonstrate and take responsibility for performance in light of agreed expectations" (TBS 2001, Shafritz 1992). Responsibility (obligation to act) differs from accountability (obligation to answer for an action) (Adair, Simpson et al. 2003).

Alignment (donor to partner country). Using systems and procedures of the end user country rather than the donor.

Attribution: Link between the intervention and the achievement of results.

Fragile state: Fragility relates to (a) the functionality of the states, reflected in their ability to secure the rights and livelihoods of their members or to project administrative and regulatory power over their territory; (b) their outputs, such as the ability to cope with poverty, violent conflict, and epidemic diseases; and (c) their relations with donors (Cammack, McLeod et al. 2006).

Harmonization (among donor agencies): Indicators include the use of common arrangement of (donor) procedures and shared analysis of assistance.

Institution: Institutions are social structures and social mechanisms of social order and cooperation governing the behaviour of individuals. Institutions are identified with a social purpose and permanence, transcending individual human lives and intention, and with the making and enforcing of rules governing cooperative human behaviour. . It is applied to formal organizations of government and public service. The term, institution, is commonly applied to customs and behaviour patterns important to a society, as well as to particular formal organizations of government and public service (North 1990).

Organizational culture: "A pattern of shared basic assumptions that the group learned as it solved its problems of external adaptation and internal integration, that has worked well enough to be considered valid and, is taught to new members as the correct way you perceive, think, and feel in relation to those problems" (Schein 1985). Schein refers to organizational culture as "a cultural web including, among others, power structures, organisational structures, and control systems" as well.

Outcome measure: "A measure that indicates the result of the performance (or non-performance) of a function(s) or processes)" (JCAHO website in Adair, Simpson et al. 2003).

Performance: There are various definitions on performance. The one chosen for the study is "How well an organization, policy, programme, or initiative is achieving its planned results measured against targets, standards or criteria" (TBS 2001 in Adair, Simpson et al. 2003).

Performance measurement: "The acquisition and analysis of information about the actual attainment of company objectives and plans, and about factors that may influence this

attainment" (Kerssens-van Drongelen 1999 B888 p. 36 in Adair, Simpson et al. 2003). Performance is not absolute and is multidimensional. As performance has many contributing factors, it cannot be gathered and assessed by a single indicator. Performance indicators are not independent. Most performance indicators stand in a relationship with one another that is –in most cases- either conflicting or complementary (Kueng B1087 2000 p.5, 9 in Adair, Simpson et al. 2003).

Performance indicator: An indicator (either qualitative or quantitative) that, when analysed, provides information on the extent to which a policy, programme or initiative is achieving its outcomes (TBS 2001 in Adair, Simpson et al. 2003).

Process measure: A process measure "focuses on a discrete service, or activity closely linked to outcomes, meaning that a scientific basis exists for believing that the process, when executed well, will increase the probability of achieving a desired outcome" [Dictionary of Health Care Terms, Organizations and Acronyms for the Era of Reform. Oakbrook Terrace, IL, JCAHO, 1995].

Public goods for infectious diseases: They include the transnational or partial global goods (surveillance, control, elimination, treatment, resistance avoidance, and knowledge), and those that are pure global public goods (disease eradication, prevention of antimicrobial resistance). This is because no country can be excluded from the benefits of production, and because consumption of one country does not reduce the amount available to other countries. EPR becomes a global public good if events are reported and access to knowledge unrestricted. Its external benefits are the potential use for disease control or for continuing scientific progress (Barrett 2005).

Semi-structured interviews: The interviewer uses a guide in which questions are covered, but can prompt for more information (Green and Browne 2005).

Annex 2. Policy Drivers

WHO Constitution (International Health Conference, New York, 22 July 1946)

WHO objective: the attainment by all peoples of the highest possible level of health.

The WHO Constitution includes some generic functions directly related to country work:

- Act as the directing and co-ordinating authority on international health work.
- Establish and maintain effective collaboration with the United Nations, governmental health administrations, professional groups and other stakeholders.
- Assist governments, upon request, in strengthening health services.
- Provide technical assistance and emergency aid upon government request/ acceptance.
- Promote and conduct research in the field of health.
- Improve standards of teaching and training in the health, medical and related professions.
- Provide information, counsel and assistance in the field of health.
- Assist in developing an informed public opinion among all peoples on matters of health.

Other functions related to specific programmes are also relevant to country work:

- To establish and maintain... epidemiological and statistical services.
- Fight epidemic, endemic and other diseases.
- Prevention of accidental injuries.
- Nutrition, and environmental protection.
- Maternal and child health and welfare.
- Mental health.

Country Focus Initiative (WHA May 2002)

The Country Focus Initiative strengthens WHO country offices; reaffirms the corporate strategy for the WHO Secretariat; and responds to changing expectations of WHO. Its expected outcomes include:

- Improved core competencies of WHO country teams so that they pursue the Country Cooperation Strategy.

- Enhanced capacity of regional and headquarters programmes to support country action.

- Improved WHO administrative systems to support WHO country offices effectively.

- Improved sharing of information between WHO and countries.

Increased WHO work with development partners, and integration of programmes in national development policies (United Nations Reform, macroeconomics and health, Global Fund, Sector-wide approach strategies).

Harmonization and alignment of development assistance (WHA58.25, 22 May 2005)

The WHA urged WHO to:

> Align country-level activities to the countries' priorities agreed by the governing bodies.

> Coordinate its activities with other United Nations system and stakeholders to improve health outcomes.

> Ensure that WHO secretariat and programmes adhere to the international harmonization and alignment agenda[44] to ensure their coherence and efficiency.

This WHA Resolution is based on three international declarations:

- Monterrey Declaration, calling on recipient and donor countries, and on international institutions to make the Official Development Assistance (ODA) more effective (International Conference on Financing for Development, March 2002).

- Rome Declaration, addressing ownership, alignment of aid to national development strategies, institutions and procedures (donor to partner country), harmonization of donors actions (donor to donor), managing for results, and accountability (High Level Forum on Aid Effectiveness, 2003).

- Paris Declaration, establishing harmonization targets. These include that 66% of aid flow is provided through programme-based approaches, 40% of field missions are joint, and 66% of country analytic work is joint (High Level Forum on Aid Effectiveness, 2005).

Integrated Disease Surveillance and Response (WHA21, May 1968; AFR/RC/48/R2, 1998)

A WHA resolution of 1968 encouraged countries to strengthen their capacity to fight infectious diseases. However, it was only in 1998 that a formal initiative on Integrated Disease Surveillance and Response System was launched at the WHO Regional Committee for Africa, and later in other WHO regions, namely South-East Asia[45]. The Integrated Disease Surveillance and Response System were applied to inter-country projects to fight infectious disease in Africa (Great Lakes region countries) and Asia (Mekong River basin countries).

The Integrated Disease Surveillance and Response System links programmatically with the implementation of IHR (2005) at country level.

International Health Regulations, IHR (2005) (Revision, WHA58.3, 13.1, 23 May 2005)

The IHR are a key global instrument for protection against the international spread of disease. Its revision, that was long needed[46], was supported by broader platforms. In particular, by the United Nations General Assembly on enhancing capacity in global public health as a way towards global security (UNGA Resolution 58/3).

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[44] As reflected in the Rome and Paris Declarations (OECD/DAC).
[45] Regional Strategic Plan for Integrated Disease Surveillance 2002-2010, WHO/SEA/CD/131, 2003.
[46] WHA48.7, WHA54.14 on global health security: epidemic alert and response, WHA55.16 on global public health response to natural occurrence, accidental release or deliberate use of biological and chemical agents or radio nuclear material that affect health, WHA56.28 on IHR, and WHA56.29 on SARS.

The IHR (2005) expect that WHO will cooperate and coordinate its activities with other stakeholders (United Nations, International Labour Organization, Food and Agriculture Organization, International Atomic Energy Agency, International Civil Aviation Organization, International Maritime Organization, International Committee of the Red Cross, International Federation of Red Cross and Red Crescent Societies, International Air Transport Association, International Shipping Federation, and "Office International des Epizooties").

There are five major changes within the revision of IHR relevant to countries:

(1) Countries must notify WHO all events that may constitute a public health emergency of international concern and respond to requests for verification of information on these events.

(2) Countries must identify National IHR Focal Points and corresponding contact points. These Focal Points ensure the operational link between States and WHO for IHR matters.

(3) The IHR(2005) set out the basic public health capacities that countries must develop to detect, report and respond to public health risks and potential public health emergencies of international concern; and those specific capacities required to implement measures at international airports, ports and ground crossings.

(4) In its dealings with countries, WHO is called to provide technical cooperation and logistical support, and to mobilize resources to enable countries to implement the IHR (2005).

(5) Countries are requested to build/maintain the capacities to implement IHR (2005) and mobilize the resources necessary for that purpose; to collaborate actively with other countries and WHO to ensure IHR effective implementation; and to support other (needy) countries to maintain the public health capacities required under the IHR (2005).

Global Outbreak Alert and Response Network (April 2000)

The GOARN is an informal network of about 200 specialized organizations, of which 30 deeply involved in providing international epidemic response. This network has developed the Guiding Principles for International Outbreak Alert and Response, and operational protocols to standardize epidemiological, laboratory, clinical management, research, communications, logistics, security, evacuation and communications systems. To date, it has carried out about 50 interventions in 40 countries, involving more than 400 specialists from the participating organizations.

Results-based management framework (adopted in 2000)

For example, the area of work of EPR for 2004-2005 (WHO 2006) at global level comprised:

- Organizational objective: To ensure that Member States and the international community are better equipped to detect, identify, and respond rapidly to threats to national, regional and global health security arising from epidemic-prone and emerging infectious diseases of known and unknown etiology, and to integrate these activities with the strengthening of their communicable disease surveillance and response systems, national information systems, and public health programmes and services.

- Indicator: Timely detection of and response to emerging disease threats of national/international concern.

- Five Organization-Wide Expected Results. These include: (i) Advocacy and partnerships to ensure provision of political, technical and financial support to global health security; (ii) Strategies formulated and support for surveillance and containment of known epidemic and emerging disease threats, especially among the poor, and those related to deliberate release of biological agents, in collaboration with WHO collaborating centres; (iii) Alert and response to public health emergencies coordinated with affected states, and stakeholders including the GOARN; (iv) Support provided to strengthen coordinated national communicable disease surveillance systems; and (v) Revision of the IHR and components and guidance for implementation provided to all Member States.

- Ten indicators with baselines and targets to assess the achievement of the expected results.

- These Organization-wide expected results are then adapted to the regional setting. For example, through the Asian Pacific Strategy on Emerging Diseases. The regional plans is composed of two regional expected results: (i) support to Member States in strengthening their national systems and in responding to epidemics and emerging infectious disease threats; and (b) establishment of the procedures for the administration of the IHR. The WHO Regional Office for South-East Asia plan of action includes nine indicators with baselines and targets as well.

- Each country will have activities in their plan of action for the EPR programme that will lead to various products conducive to the achievement of (country) office specific expected results (three-five average).

Annex 3. Literature search

Database name	Search terms
PHIN (CAN)	Outbreaks or epidemics or pandemics AND countries.
PubMed	Performance measurement and (models or frameworks or benchmarking). MeSH: (performance measures or performance indicators) and (delivery of health care or national health programmes). MeSH: (benchmarking or quality indicators, health care) and (national health programmes or delivery of health care). PubMed Health Services Research Queries: search "health systems", category "outcomes assessment", scope "broad, sensitive search". ("organization and administration" (subheading) OR "standards" (subheading)) AND ("financial management" (MESH) OR "outcome and process assessment" (MESH)) AND ("World Health Organization" (MESH) limits five last years) AND ("communicable diseases" (MESH) OR "communicable diseases" OR "population surveillance").
EMBASE	FTS: performance measurement; health system performance. FTS/MeSH: (health care quality) and (health care system) and (measurement); (models or frameworks) and (health care quality) and (measurement). Communicable OR infectious OR epidemic* OR SARS OR cholera OR dengue OR influenza... the other diseases that interviewees referred to as major events in the research.
Web of Science	• evaluation OR measure* OR assess* OR overview OR audit OR monitor* OR analyse* OR appraise*. • multilateral OR bilateral OR (non AND governmental AND organization). • assistance OR cooperation OR collaboration OR relationship OR partnership OR aid OR support. • technical. • effective* OR impact OR sustainable* OR relevant* OR effect* OR outcome* OR output* OR performance* OR result* OR accountable* OR attribute* OR benefit* OR cost* OR change* OR contribute*. • initiative OR programme* OR project. • global OR international. • health. • communicable OR infectious OR epidemic* OR SARS OR cholera OR dengue OR influenza... the other diseases that interviewees referred to as major events in the research.
CAB Direct	• Nepal, Myanmar. • Communicable OR infectious OR epidemic* OR SARS OR cholera OR dengue OR influenza... the other diseases that interviewees referred to as major events in the research.
WHO websites Nepal, Myanmar, Regional Office for South-East Asia, global	• Search of country documents, Country Cooperation Strategies, annual and biennial reports, evaluations, reports, technical missions in EPR, newsletters, flash appeals. • Search IHR. • Global public goods. • Global Outbreak Alert and Response Network (GOARN).

Database name	Search terms
Google scholar	• Numerous searches combining various terms of the research, for example: Myanmar or Nepal with epidemics, infectious disease surveillance. • Fragile states and health. • Organizational AND performance AND assessment. • Attribution AND assessment OR measurement. • GOARN, global public goods, Asian Pacific Strategy on Emerging Diseases, Integrated Disease Surveillance and Response System (IDSR).
Other databases**	• Searched for single relevant words. • Searched evaluation reports by topic (aid harmonization, effectiveness, attribution, results-based management, etc.) by country and by organization. • Searched for specific project words, e.g. MOPAN, Oslo Study, etc.

**= including the World Bank, the Department for International Development of the United Kingdom (DFID), the Organization for Economic Cooperation and Development/Development Assistance Committee (OECD/DAC), Swedish International Development Cooperation Agency (SIDA), Canada International Development Agency (CIDA), United Nations Evaluation Group (UNEG), or UNICEF.

Annex 4. Results Based-Management Framework, Focus of study

				Phase/component	Country A	Country B
Key phases & components integral to results-based managed organizations	Results-based management system	Performance measurement	Strategic planning	Clear & measurable objectives (results) aided by logical frameworks		
				Selecting indicators to measure progress in each objective		
				Set explicit targets for each indicator to judge performance		
				Develop performance monitoring systems to collect results data regularly		
				Review, analyze, report actual results vis-à-vis targets		
				Integrate evaluations to complement performance info from monitoring systems		
				Use performance info for management, accountability, decision-making, & external reporting		
	Accountability				WHO Global Accountability Framework (´06)	
	Decentralization and delegation of authority				SEARO common framework for all countries in the Region	
	Client focus				Through CCS	Through CCS
	Participation and partnership. Seeking harmonization				UNDAF, other platforms:	UNDAF, other platforms:
	Reformed operational policies/ procedures in way of working				Common to all countries SEAR: reprofiling of teams, staff development:	
	Supporting mechanisms: training, guidebooks, best practices series, performance info databases.				Common to all countries SEAR: reprofiling of teams, staff development:	
	Cultural change				At all WHO levels, influenced by SEAR policies and WHO country leadership	

Adapted from Binnendjik, 2000

Annex 5: Semi-structured interviews: Questions by stakeholder group

Link to research question	Interview Question Number	Interview Questions	WHO country team	Ministry of Health	United Nations country team	Other stakeholders in country	WHO regional office/headquarters	Other partners (global level)
Appropriateness of WHO tools in results-based management	TQ1	What is your experience in using WHO tools and systems to assess WHO performance?	X				X	
	TQ2	What are the three main advantages of the tools and systems that you use to assess WHO performance in the area of EPR?	X				X	
	TQ3	What are the three main inconveniences of the tools and systems that you use to assess WHO performance in the area of EPR?	X				X	
	TQ4	How do you think that they are influencing the way in which WHO manages its operations at the various levels?	X				X	
	TQ5	What are your main three suggestions for improving the systems and tools for EPR in the current management framework of WHO?	X				X	
Major changes EPR IN country. Meaning of "results" in EPR to main health stakeholders	RQ1	What have been the three major events related to infectious diseases and epidemics in your country since January 2004?	X	X	X	X		
	RQ2	How were these events addressed?	X	X	X	X		
	RQ3	What were the main results achieved with respect to each event to your opinion?	X	X	X	X		
	RQ4	Was there any result that was not achieved?	X	X	X	X		
	RQ5	Who were the main actors involved in addressing these events?	X	X	X	X		
	RQ6	What was your most important contribution to each of these three events?	X	X	X	X		
	RQ7	What would you think was the most important contribution from WHO?	X	X	X	X		
Attribution of results to WHO	AQ1	What do you consider to be the three main components of the EPR in your country?	X	X	X	X		
	AQ2	What are the three main results with respect to EPR in your country since January 2004?	X	X	X	X		
	AQ3	Who have been the major actors involved?	X	X	X	X		
	AQ4	What has been your contribution to EPR since January 2004?	X	X	X	X		
	AQ5	What do you consider to be the main results that you have achieved?	X	X	X	X		
	AQ6	What do you think was the contribution from WHO to EPR since 2004?	X	X	X	X		
	AQ7	What would you say were its major achievements?	X	X	X	X		
	AQ8	What would it happen if WHO "were not present" in EPR in this country?	X	X	X	X		
	AQ9	How do you think that attribution of WHO to results in EPR in this country could be better addressed?	X	X	X	X		
International cooperation and effectiveness	CQ1	How do you think that international partners in health could deal with attribution issues in countries?						X
	CQ2	How do you think that WHO could deal with attribution in EPR in countries?						X
	CQ3	What are the three main issues that WHO would need to address in relation to their performance systems and tools?						X
	CQ4	What are your three recommendations to WHO for better country support through the improvement of its monitoring and evaluation systems/tools?						X

Annex 6: Semi-structured interviews by stakeholder group, Myanmar

A. Exposure to questions by stakeholder group, Myanmar 2007

Link to research questions	Interview Question Number	Interview Questions	National NGOs (n=4)	Ministry of Health (n=6)	WHO country team (n=10)	Other international partners (n=6)	TOTAL (N=26)
Appropriateness of WHO **tools** in results-based management	TQ1	What is your experience in using WHO tools and systems to assess WHO performance?	0	5	10	0	15
	TQ2	What are the three main advantages of the tools and systems that you use to assess WHO performance in the area of EPR?	0	5	10	0	15
	TQ3	What are the three main inconveniences of the tools and systems that you use to assess WHO performance in the area of EPR?	0	5	10	0	15
	TQ4	How do you think that they are influencing the way in which WHO manages its operations at the various levels?	0	4	9	0	13
	TQ5	What are your main three suggestions for improving the systems and tools for EPR in the current management framework of WHO?	0	4	9	0	13
Major events in country. Meaning of "**results**" in EPR to main health stakeholders	RQ1	What have been the three major events related to infectious diseases and epidemics in your country since January 2004?	4	3	6	6	19
	RQ2	How were these events addressed?	4	3	6	6	19
	RQ3	What were the main results achieved with respect to each event to your opinion?	4	3	5	6	18
	RQ4	Was there any result that was not achieved?	4	3	5	6	18
	RQ5	Who were the main actors involved in addressing these events?	4	3	5	6	18
	RQ6	What was your most important contribution to each of these three events?	4	3	5	6	18
	RQ7	What would you think was the most important contribution from WHO?	4	3	5	6	18
National program. **Attribution** of results to stakeholders	AQ1	What do you consider to be the three main components of the EPR in your country?	4	5	3	5	17
	AQ2	What are the three main results with respect to EPR in your country since January 2004?	4	5	2	5	16
	AQ3	Who have been the major actors involved?	4	5	2	5	16
	AQ4	What has been your contribution to EPR since January 2004?	4	5	2	5	16
	AQ5	What do you consider to be the main results that you have achieved?	4	5	2	5	16
	AQ6	What do you think was the contribution from WHO to EPR since 2004?	4	5	2	5	16
	AQ7	What would you say were its major achievements?	4	5	2	5	16
	AQ8	What would it happen if WHO "were not present" in EPR in this country?	4	6	6	6	22
	AQ9	How do you think that attribution of WHO to results in EPR in this country could be better addressed?	4	5	2	5	16

<u>Note</u>: Several MOH staff were exposed to questions under TQ because of their experience with using WHO tools and systems (as previous WHO staff, or as MOH planning counterparts)

B. Correspondence between numbers and letters in interviewee quoting and group to which the interviewee belonged, Myanmar 2007

Individual interviewee Number assigned	Stakeholder group Number assigned	Group to which the interviewee belonged
1	i	WHO Country Team
2	i	WHO Country Team
3	i	WHO Country Team
4	i	WHO Country Team
5	i	WHO Country Team
6	i	WHO Country Team
7	i	WHO Country Team
8	i	WHO Country Team
9	i	WHO Country Team
10	i	WHO Country Team
11	ii	Ministry of Health
12	ii	Ministry of Health
13	ii	Ministry of Health
14	ii	Ministry of Health
15	ii	Ministry of Health
16	ii	Ministry of Health
17	iii	International partner
18	iii	International partner
19	iii	International partner
20	iii	International partner
21	iii	International partner
22	iii	International partner
23	iv	National NGO
24	iv	National NGO
25	iv	National NGO
26	iv	National NGO

Annex 7: Semi-structured interviews by stakeholder group, Nepal

A. Exposure to questions by stakeholder group, Nepal 2007

Link to research questions	Interview Question Number	Interview Questions	National NGOs (n=1)	Ministry of Health (n=10)	WHO country team (n=8)	Other international (n=7)	TOTAL (N=26)
Appropriateness of WHO tools in results-based management	TQ1	What is your experience in using WHO tools and systems to assess WHO performance?	0	5	6	0	11
	TQ2	What are the three main advantages of the tools and systems that you use to assess WHO performance in the area of EPR?	0	3	4	0	7
	TQ3	What are the three main inconveniences of the tools and systems that you use to assess WHO performance in the area of EPR?	0	3	6	0	9
	TQ4	How do you think that they are influencing the way in which WHO manages its operations at the various levels?	0	3	6	0	9
	TQ5	What are your main three suggestions for improving the systems and tools for EPR in the current management framework of WHO?	0	3	6	0	9
Major events in country. Meaning of "results" in EPR to main health stakeholders	RQ1	What have been the three major events related to infectious diseases and epidemics in your country since January 2004?	1	9	3	7	20
	RQ2	How were these events addressed?	1	8	3	7	19
	RQ3	What were the main results achieved with respect to each event to your opinion?	1	8	3	7	19
	RQ4	Was there any result that was not achieved?	1	8	3	7	19
	RQ5	Who were the main actors involved in addressing these events?	1	8	3	7	19
	RQ6	What was your most important contribution to each of these three events?	1	8	3	7	19
	RQ7	What would you think was the most important contribution from WHO?	1	8	3	7	19
National program. Attribution of results to stakeholders	AQ1	What do you consider to be the three main components of the EPR in your country?	1	8	3	6	18
	AQ2	What are the three main results with respect to EPR in your country since January 2004?	1	8	3	6	18
	AQ3	Who have been the major actors involved?	1	8	3	6	18
	AQ4	What has been your contribution to EPR since January 2004?	1	8	3	6	18
	AQ5	What do you consider to be the main results that you have achieved?	1	8	3	6	18
	AQ6	What do you think was the contribution from WHO to EPR since 2004?	1	9	3	6	19
	AQ7	What would you say were its major achievements?	1	9	3	6	19
	AQ8	What would it happen if WHO "were not present" in EPR in this country?	1	10	3	6	20
	AQ9	How do you think that attribution of WHO to results in EPR in this country could be better addressed?	1	10	3	6	20

Note: Several MOH staff were exposed to questions under TQ because of their experience with using WHO tools and systems (as previous WHO staff, or as MOH planning counterparts)

B. Correspondence between numbers and letters in interviewee quoting and group to which the interviewee belonged, Nepal 2007

Individual interviewee Number assigned	Group to which the interviewee belonged
14	National NGO
2	Ministry of Health
3	Ministry of Health
4	Ministry of Health
5	Ministry of Health
6	Ministry of Health
7	Ministry of Health
8	Ministry of Health
9	Ministry of Health
10	Ministry of Health
27	Ministry of Health
11	WHO Country Team
12	WHO Country Team
15	WHO Country Team
18	WHO Country Team
21	WHO Country Team
23	WHO Country Team
24	WHO Country Team
28	WHO Country Team
13	International partner
16	International partner
17	International partner
19	International partner
22	International partner
25	International partner
26	International partner

Annex 8. Research briefing used to request interviews

"Assessing WHO contribution to national programmes on epidemic preparedness and response[47]: Towards a set of tools for exploring levels of attribution"[48]

Maria J. Santamaria Hergueta, Department of Public Health and Policy, London School of Hygiene and Tropical Medicine, in collaboration with the WHO Regional Office for South-East Asia

WHO maintains offices in 145 countries, where it supports national public health development and practice. Plans of Action in countries are guided by Country Cooperation Strategies, and achievements influence the management of WHO operations across the Organization. Therefore, assessing the impact of WHO support to country programmes, in terms of both policy decision-making and improvement of health outcomes, is important. This is so for those priority programmes that respond to global public health priorities, such as the programme on epidemic preparedness and response (EPR). EPR addresses the implementation of the IHR (2005) and is one of the six global WHO priorities in the current Global Programme of Work 2006-2015, namely global health security. It is linked to regional initiatives, such as the Asia Pacific Region Strategy on Emergent Diseases (2005).

The ways in which WHO country offices go about assessing routinely the impact and attribution of their activities in supporting technical programmes vary considerably. This variation is influenced by the contextual factors that affect health policy in each country and the nature of the programme. However, variation is also related to the different systems and tools used to measure performance and to the meaning that different stakeholders attach to "results". These factors influence the delivery and management of programmes and the use of resources.

This research will use a qualitative methodology within two (country) cases. It will explore the use of logframes to assess WHO programmatic performance in EPR, in the context of results based management. It will a) assess the comparative advantages and challenges of various assessment tools and systems that WHO uses to measure its performance in EPR at country level; b) address the WHO contribution in terms of results and impact; and c) propose options for addressing WHO accountability performance and cooperation effectiveness in EPR at country level.

Background

WHO work at country level

Despite the uniqueness of each country plan of action, all operations in countries share some commonalities specific to WHO. WHO does not implement programmes directly and therefore, achieving results in public health depends on its partners. A second characteristic is the WHO budget structure. WHO Country Teams control only the regular budget (often less than 50% of total resources) at the start of the planning cycle. A third characteristic of WHO work at country level is the cherry picking effect that takes place not only internally, with financial partners influencing WHO priorities through extrabudgetary allocations, but also at country level where WHO consensual way of working allows local partners to select their priorities.

The Policy Drivers of WHO at country level are (a) the WHO constitution (1946); (b) the Country Focus Initiative (2002); and(c) the Trends in harmonization and alignment of development assistance (2005).

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[47] Also referred to as Communicable Diseases Surveillance or Epidemic Alert and Response depending on the biennium considered.

[48] The title of the research project was modified after the field data collection to guide the readers of the research document to the results of the study. Consequently the material used prior and during data collection (such as ethical approval and associated documents are affixed with the original title)

Epidemic Alert and Response

Strengthening systems for surveillance and response to infectious diseases, in particular to those with high epidemic potential is one of the six global priorities within the WHO 11th Global Programme of Work (2006-2013). EPR is an area of high visibility for WHO in countries. WHO is praised mostly for the support provided in epidemic responses such as Severe Acute Respiratory Syndrome, Ebola virus, and "avian" influenza. In three countries where the perception of senior MOH staff on the alignment of WHO support to national public health priorities was sought, EPR rated lower than specific disease programmes such as those on vaccine preventable diseases, HIV/AIDS, or malaria.

The Policy Drivers of WHO work in epidemic alert and response are (a) the Integrated Disease Surveillance and Response (1998);(b) the revised IHR (2005); (c) the Asia Pacific Region Strategy on Emerging Diseases 2005-2010; and (d) the Global Outbreak Alert and Response network (2000).

Assessing performance at country level

The table below illustrates the various types of assessments that WHO uses to report on results of its programmatic work in countries. Country performance monitoring is led by the origin of resources. However, WHO support to a country is not limited to the country plan of action, and includes support from regional offices and headquarters. At present, there is no country-based routine integrated monitoring of the regional office or headquarters offices contribution. This could result in error of assessment of resources invested in the country plan of action and the WHO results.

<table>
<tr><td colspan="2" rowspan="2"></td><td colspan="2">Consumption</td></tr>
<tr><td>Internal</td><td>External</td></tr>
<tr><td rowspan="4">Timing</td><td>Routine/ periodical</td><td>Mid-Term review of plan of action (12th month).
End of Biennium report.</td><td>Country Annual reports (public advocacy).
Periodical newsletters (country work).
Annual reports global partnerships.</td></tr>
<tr><td>Ad hoc</td><td>Technical missions to countries.
Country performance audits.
Operational audits.
External Auditor reports.</td><td>Global thematic evaluations.
Programmatic evaluations (of an programme).
Global partnerships evaluation reports.
Peer-reviewed national/WHO programmes.
Ad hoc briefings (epidemic responses).
Report to donor agencies on specific projects.</td></tr>
</table>

The Policy Drivers of WHO assessment of performance are (a) the Results-based management framework (2000) and the (b) accountability and oversight frameworks subsequently developed.

Research plan

Aims and objectives[49]

The research aims at improving the systems that WHO uses to assess its contribution to national EPR programmes at country level, to become more effective. Moreover the research aims at contributing to the debate on the appropriateness of the methods and approach for measuring organizational performance.

This research explores the use of logframes to assess the programmatic performance in a multilateral organization at country level, in the context of an increased focus on results based management. Its specific objectives are:

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49 The objectives evolved during the course of the work and therefore the wording in the main document has been reviewed for consistency.

> assess the comparative advantages and challenges of various assessment tools and systems that WHO uses to measure its performance in EPR at country level;

> address the WHO contribution in terms of results and impact in the area studied; and

> propose options for addressing WHO accountability performance and cooperation effectiveness in EPR at country level.

Planned outcomes

The research is expected to yield the following products:

- A critique on the systems that WHO uses at country level in the context of results-based management.

- An understanding on what "results" in EPR at country level means to the various stakeholders.

- A discussion on the issues that arise in relation to the attribution of results in EPR to WHO contribution in the two countries studied.

- A discussion on the generalization of the results of the research to other programmes, countries, or users.

- A set of options that WHO could adopt when assessing its contribution to other settings.

Theoretical background

This research is an organizational research study rather than a policy analysis. It assumes that what is known on WHO results in EPR in countries is partial, because the routine systems and tools to assess performance do not account for the various perspectives on what "results" mean or the full context in which these happen. In this sense, the primary interest of the study is not to judge what "is" this reality, but rather to approach what constitutes the reality "through the interpretation of the different actors concerned".

Research design

The research is designed around two country case studies to examine the "how" and "why" of a contemporary (2004-2007) event (WHO assessment of performance and results) happening in an environment that the researcher does not control that is affected by contextual factors (country A and B settings). Running as a theme between the two cases will be three embedded units of analysis: the performance of tools and systems; results; and attribution (Figure 1). The research includes two countries of the WHO South-East Asia Region.

Data collection and generation strategies

The research will use:

(a) Documentary collection and analysis to test the appropriateness of the tools used to measure WHO results at country level; to assess how WHO reports its results in epidemic preparedness and response in countries; and to identify attribution issues;

(b) Qualitative interviews to contextualize approaches to attribution and its assessment, and to approach the meaning of what constitutes results for WHO in EPR in the countries studied;

(c) Focus group with the WHO Country Team to contextualize its work and identify issues related to the use of systems and tools to monitor WHO performance in EPR in its country.

Figure 1. Research design: Case study with two-cases and embedded three units of analysis
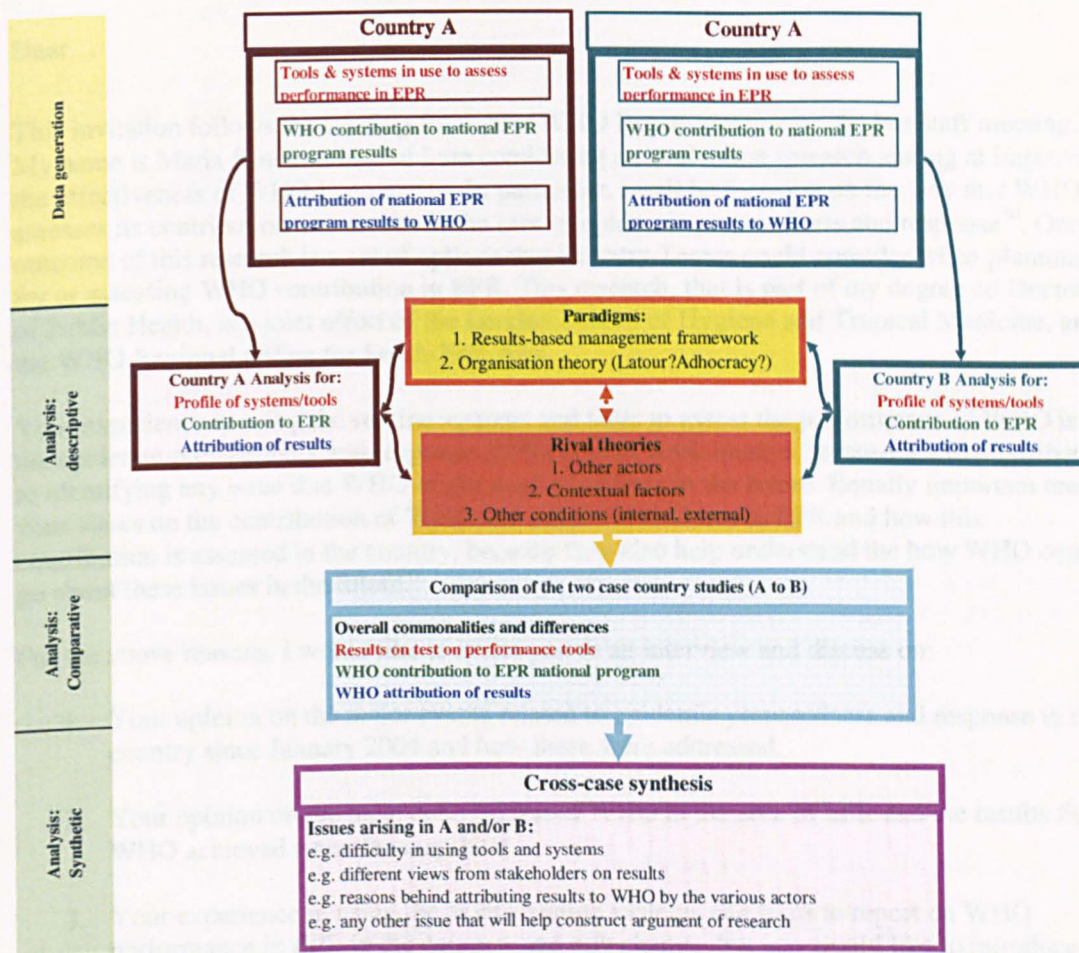
Data analysis

There will be an analysis of how the tools and systems perform what is documentary- based. This analysis will be linked to a thematic analysis for the reasons that help explain these findings and their implications. The organization of the data will be non cross-sectional, and within each country studied, data will be organized into categories and themes. These will be analysed for those issues that will emerge from the documentary material, the interviews and focus groups; and/or for those general headings under which most of the data gathered can be explained. Therefore, the two countries studied will be compared for their "stories". Subsequently, there will be a discussion on the common issues that appear in both countries (Figure 1). These will guide the conclusions and recommendations of the research.

Dissemination of results

The dissemination of results will be addressing (a) how the main lessons learned can benefit other countries; (b) what results can be generalized to other countries; and (c) what can be applied to the analysis of WHO performance at country level (issues, methodology). There will be a briefing on the results and on the proposed options offered to the decision makers most concerned with measuring WHO results at country level. These will include staff from WHO Regional Office for South-East Asia and headquarters staff. The main results of the research will be packed for publication in specialized peer-reviewed journals.

Annex 9: Model of invitation to interview

Dear...

This invitation follows the briefing from your WHO Representative on the last staff meeting. My name is Maria Santamaria, and I am conducting an evaluation research aiming at improving the effectiveness of WHO in countries. In particular, I will be focusing on the way that WHO assesses its contribution and results in the area of epidemic preparedness and response[50]. One outcome of this research is a set of options that Country Teams could consider when planning for or assessing WHO contribution in EPR. This research, that is part of my degree ad Doctor of Public Health, is a joint effort of the London School of Hygiene and Tropical Medicine, and the WHO Regional Office for South-East Asia.

Your experience in using the routine systems and tools to assess the performance of WHO in the epidemic preparedness and response (EPR) area of work matters because it will contribute to identifying any issue that WHO might need to address in the future. Equally important are your views on the contribution of WHO and other stakeholders to EPR and how this contribution is assessed in the country, because they also help understand the how WHO could go about these issues in the future.

For the above reasons, I would like to invite you to an interview and discuss on:

1. Your opinion on the major events related to epidemic preparedness and response in the country since January 2004 and how these were addressed.

2. Your opinion on the main contribution of WHO in the area of EPR and the results that WHO achieved since January 2004.

3. Your experience in using the WHO routine systems and tools to report on WHO performance in EPR in the country, and any change that you would like to introduce in future.

Your participation is voluntary and the interview will last about 60 minutes. I will treat the information that you will provide during the interview confidentially; and will use it only for the purpose of the current research.

Would it be agreeable to you if we met at... in your office? In case that you would have a better suggestion, please let me know. Also let me know if you need any further information in relation to the interview.

I thank you in advance for your participation in this research and look forward to a fruitful interviewing,

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[50] Study title: "Assessing WHO contribution to national programmes on epidemic preparedness and response: Towards a set of tools for exploring levels of attribution".

Annex 10: Information sheet and consent form

Information sheet

<u>Study title</u>: "Assessing WHO contribution to national programmes on epidemic preparedness and response: Towards a set of tools for exploring levels of attribution".

<u>Principal researcher</u>: Maria Santamaria, Doctor of Public Health candidate, London School of Hygiene and Tropical Medicine, United Kingdom - c/o WHO Country Office in ...., Tel. ..

Dear Participant,

Fighting communicable diseases that could have high epidemic potential has become a priority for public health in (name of country studied). In recent years, there has been considerable pressure from the international community to get minimum standards in countries to fight against those diseases that could become an international, or even global threat to populations. Recent epidemics of SARS or avian influenza are only two examples, there are certainly many others.

You are one of the institutions/organizations working in the area of epidemic preparedness and response (EPR) in... (country studied) and therefore may be aware that WHO supports this programme as well. Since 2000, WHO agreed that results in its programmes will influence the way that the Organization functions at country level. However, WHO works through its counterparts, and therefore WHO success depends largely on the views and actions of its stakeholders.

The specific objectives of the study are:

(a) assess the comparative advantages and challenges of various assessment tools and systems that WHO uses in this country to measure its performance in EPR;

(b) address the WHO contribution in terms of results and impact in the area studied; and

(c) propose options for addressing WHO accountability performance and cooperation effectiveness in EPR at country level.

Therefore, your views are important because they will help understand how the contribution of WHO to EPR is perceived by its stakeholders. Your views will contribute to identifying any weakness that WHO could address in the future. By helping WHO to improve its systems and tools to measure its performance in EPR, you will help WHO improving the way it works with you in the future.

The information collected will be treated confidentially. It will be kept securely and will not be shared with anyone not connected with the research project. The principal researcher will be responsible for the confidentiality of all data collected. All information collected will be linked to each participant only by a number. All survey instruments will be destroyed at the end of the study.

Your participation in this study is entirely voluntary. If you agree to participate, you may refuse to answer any particular question, or to continue at any time without having to give a reason.

Do I have your permission to proceed?   Yes / No

Consent form

<u>Study title</u>: "Assessing WHO contribution to national programmes on epidemic preparedness and response: Towards a set of tools for exploring levels of attribution".

<u>Principal researcher</u>: Maria Santamaria, Doctor of Public Health candidate, London School of Hygiene and Tropical Medicine, United Kingdom; c/o WHO Country Office, ... (address, telephone).

Declarations:

"I have read the information sheet concerning this study [or have understood the verbal explanation] and I understand what will be required of me if I take part in it".

Agree / Disagree   Initialled_____

"My questions concerning this study have been answered by_____".

Agree / Disagree   Initialled_____

"I understand that at any time I may withdraw from this study without giving a reason and without any ramifications to me".

Agree / Disagree   Initialled_____

"I agree to take part in this study and may be quoted or may not be quoted at all, or may have any of my results included in any analyses". (**Please indicate your choice by drawing a line through the option that is not applicable).**

Signed _____   Dated _____

Witnessed by interviewer _____   Dated _____

Annex 11. Coding categories and hierarchies

PARENT	CHILD	GRAND CHILD
Appropriation of results (& meaning): *This node includes aspects of contribution (contribution of WHO to Myanma and Nepal in EPR); the notion of contribution in relation to performance; and fellowships. It includes attribution as well, through "what would happen if WHO not in Myanmar/Nepal?", and attribution issues.*	Attribution	Other agencies
		WHO
	contribution versus performance	
	fellowships	
	Results (meaning)	
	WHO contribution in Myanmar/Nepal	
	WHO not present in Myanmar/Nepal	
EPR issues	EPR Prog in Myanmar/Nepal	
	EPR technical issues	
	EPR within WHO	
	IHR	
	Avian influenza	how it is being addressed
		not achieved
		partners
		results
	Cholera	
	Dengue hemorrhagic fever	
	HIV/Aids	
Events: *when asked about the events of significant imporance in relation to infectious diseases with epidemic potential since january 2004*	Malaria	partners
		Results
	Measles	
	Polio	how is being addressed
		not achieved
		partners
		results
	SARS	
	Tsunami Dec 04	
	Tuberculosis	
	Other diseases/events	
Ownership of the WHO plan of work: *This node contains specific aspects of the plan of work, in particular the budget structure, the ownership of the country plan, the plan of work itself, and the setting up of the priorities. Because all these factors influence its ownership.*	Budget structure influence	
	ownership of WHO plans	
	Plan of work	
	Setting up priorities in plan of work	
Specific country conditions: *Included here alll aspects relative to the country conditions that are not directly related to the events under the research, but that affect their responses to them. Political environment & situational analysis included here.*	specific country conditions	
Stakeholders: *Includes mentions to issues related to the NGOs, or the process in which the MOH and the partners plan. It includes the donor priorities and views. I used it also the roles and responsibilities that they have with respect to their involvement when needed.*	Donor priorities and perspectives	
	MMR and partners planning process	
	NGOs	
	accountability issues	
	appreciation of tools	
	Impact of using tools	on MOH
		On country office operations
		On staff
		on regional office/headquarters
	looking at performance	
	process to assess the plan of work	
Tools and systems: *This node deals with the meaning of performance, accountability, the tools to measure performance, the un-reported support to Myanmar/Nepal, the impact of the various tools, programs reviews, Activity Management System (AMS), Global Monitoring System (GSM), individual performance management (Performance Management Development System, PMDS), and rules and regulations.*	rules and regulations	
	suggestions for improvement	
	System AMS	alternative solutions
		AMS perception problems
		AMS uses
		EPR specific issues
		who uses the AMS
	System GSM	
	System PMDS	applicability of the tool
		Perception
	System program reviews	EPR national program
		Vaccine Preventable Diseases
		HIV-AIDS
		Malaria
		Tuberculosis
	Tools mentioned spontaneously	
	WHO unreported support	
	relations WHO and MOH	
WHO Organisational identity: *Used to describe the relations with MOH and with others, as well as with the Regional Office. Also refers to specific issues of the country team, how it changed in recent years, and what it should do.*	Relations WHO and other partners	
	support from WHO regional office	
	WHO needs to do	
	WHO specific country team issues	
	WHO work at country level changed!	

Frustration: *This node includes all quotings that expressed some sense of frustration due to any cause. This node was established as a collection of aspects potentially challenging the work of WHO staff and partners in Myanmar and Nepal when dealing with EPR & other areas of work*

Annex 12. Advisory Committee and Review Session Committee members

Advisory Committee:

Name	Area of expertise	Title	Institution
Gill Walt	WHO work at country level, International health	Professor International Health Policy	London School Hygiene and Tropical Medicine
Howard White	Research methodology, cooperation effectiveness	Executive Director	International Initiative for Impact Evaluation, 3ie
Xavier Leus	Multilateral agencies and Organizational management	Resident Coordinator	United Nations Country Team, Madagascar
Mynt Hwe	Research methodologies, South-East Asia	Director Programme Management	WHO, South East Asia Regional Office, New Delhi
Mike Ryan	Communicable diseases surveillance and response	Director Epidemic and Pandemic Alert & Response	WHO headquarters, Geneva
Alan Schnur	WHO work at country level	Senior Auditor	
Deepak Thapa	Performance assessment	Deputy Director, Internal Oversight Services	

Review Session Committee:

Name/ (Role)	Area of expertise	Title	Institution
Richard Coker (Independent Assessor)	Infectious diseases epidemiology	Reader, Health Services Research Unit	London School of Hygiene and Tropical Medicine
Simon Lewin (Independent Assessor)	Research methodology, research-policy relation	Senior Lecturer Public Health, Public and Environmental Health Research Unit	
John Cairns (Chair)	Health economics (Research Degrees Coordinator)	Professor Health Economics, Health Services Research Unit	
Nick Goodwin (Supervisor)	Organizational management, systems research	Senior Lecturer Health Services Delivery, Health Services Research Unit	

Review session, 4 May 2007

Annex 13. LSHTM Ethics Committee Approval

**LONDON SCHOOL OF HYGIENE
& TROPICAL MEDICINE**

ETHICS COMMITTEE

APPROVAL FORM

Application number:	**5133**
Name of Principal Investigator	**Maria J. Santamaria Hergueta**
Department	**Public Health and Policy**
Head of Department	**Professor Anne Mills**

Title: '**Assessing WHO contribution to national programmes on epidemic preparedness and response: towards a set of tools for exploring levels of attribution'**

This application is approved by the Ethics Committee.

Chair   ....
Professor Tom Meade

Date .... 21 May 2007 ....

Approval is dependent on local ethical approval having been received.

Any subsequent changes to the consent form must be re-submitted to the Committee.

Annex 14. Country background information: Myanmar

Country

Myanmar shares geographical borders with China, Laos, Thailand, Bangladesh, India, and with the Bay of Bengal (Figure 15).

Figure 15. Map of Myanmar

It has a population of 52 million, of whom 30% live with less than US$ 1 per day. In 2002, it received only GB£ 1 per person in aid. This is one of the lowest levels of assistance in the world - over 20 times less than for Cambodia, and 10 times less than that for Zimbabwe. Public investment in education and healthcare is amongst the lowest in the world (US$ 1/capita on education and US$ 0.5/capita on health) (DFID 2008).Myanmar's political system has been a military-led government since 1962. The ruling junta, the State Peace and Development Council (SPDC) went through changes in leadership of the government and the military in 2005. The Government then moved the country's capital to Nay Pyi Daw. In 2006, Myanmar experienced much internal instability, with a major offensive from the national armed forces against the separatist Karen National Liberation Army that caused casualties and displaced populations (Encyclopædia-Britannica 2008).

Source: https://www.cia.gov/library/publications/the-world-factbook/maps/bm-map.gif

Myanmar is considered a fragile state (OECD/DAC 2006). Fragility relates to (a) the functionality of the states, reflected in their ability to secure the rights and livelihoods of their members or to project administrative and regulatory power over their territory; (b) their outputs, such as the ability to cope with poverty, violent conflict, and epidemic diseases; and (c) their relations with donors (Cammack, McLeod et al. 2006). For the Development Assistance Committee of the OECD, Myanmar needs special attention because the state fragility is acute, with low or declining resource allocations and high level of needs, and because it lacks coherent approaches to international engagement (OECD/DAC 2006). Myanmar is included among the conflict-affected low-income countries under stress without a World Bank country policy and institutional assessment together with 18 other countries (World-Bank 2006).

Myanmar is part of several regional networks related, although not specific, to EPR, such as the Association of South East Nations and the Mekong Basin Project. However, the former became involved politically and financially through the establishment of a trust fund to fight SARS (Ashraf 2003; Curley and Thomas 2004; Caballero-Anthony 2005). The Mekong Basin Project supported epidemic preparedness by fostering an integrated disease surveillance system (WHO 2003).

Addressing infectious diseases

Myanmar addresses major infectious diseases through its national programmes hosted at the MOH. Some of these national programmes focus on specific diseases and are well structured with their own surveillance systems (e.g. vaccine preventable diseases, tuberculosis, malaria, HIV/AIDS). Other programmes deal with emerging diseases through the National Plan of Action on Integrated Disease Surveillance and Response, under the Central Epidemiological Unit (Table 20, page 206). In 2000, the country established the Integrated Disease Surveillance System as to fight infectious diseases in the Mekong Basin region. In 2001, the component of response was added to it under a broader initiative of the health and nutrition commission of the Association of South-East Asian Nations (The-Rockefeller-Foundation 2007).

In 2003, Myanmar assessed its national surveillance system. Based on the results, the MOH identified the National Plan of Action for Integrated Disease Surveillance in 2004, establishing links with the surveillance of non-communicable diseases. In 2004-2005, the MOH conducted advocacy meetings on Integrated Disease Surveillance and Response System. These served to develop guidelines and the workshop model to train the Rapid Response Teams. The training of

Rapid Response Teams rolled out to state level in 2007, and will do so to divisional level in 2008. The National Plan served to develop the Action Plan against Human Pandemic influenza.

Table 20. Major events of infectious diseases and epidemics mentioned by interviewees and selected characteristics of the national programmes to address them, Myanmar 2007

Event/ epidemic	Control programme	Coordination mechanisms
Pandemic influenza preparedness	Inter-ministerial plan established in 2004	Intersectoral. Multi-donor plan. WHO coordinates external donors plan since 2006.
Tuberculosis	National plan (2006-10)	Inter-agency group under 3Diseases Fund fund coordination mechanism.
Malaria	National plan (2006-10)	
HIV/AIDS	National plan (2006-10)	
Polio	National plan (2007-11)	Inter-agency coordination committee.
Measles	National plan (2007-11)	Inter-agency coordination committee.
Dengue*	Not clearly outlined	*Ad hoc* emergency committee if epidemic declared
Cholera	Under diarrhoeal diseases	*Ad hoc* emergency committee if epidemic declared
Severe Acute Respiratory Syndrome	*Ad hoc* plan of action	Intersectoral. Multi-donor plan established.

* = and dengue hemorrhagic fever

The current legal framework to deal with emerging infectious diseases dates from 1995 (BLC 2008). The Central Epidemiological Unit ensures the technical secretariat to the Commission on Border Health, Trade and Migration. There are plans to submit the revised draft of the Law on Communicable Diseases in line with the revised IHR to the Cabinet in early 2008

The development of generic health information systems at central level receives little support from external stakeholders with the exception of WHO (network of regional surveillance officers for immunisation-preventable diseases). In addition, Myanmar receives *ad hoc* support for specific purposes. For example, the country received USAID support to monitor and evaluate the presence of avian flu within the framework of the preparedness plan; and to support the fight against HIV/AIDS through the development of a logistic and management information system (from the Bill & Melinda Gates Foundation) and of second generation HIV surveillance systems (from UNAIDS/WHO) (Boned-Ombuena 2007).

WHO country work

The WHO collaborative work in Myanmar is done through the technical staff within the Country Team who work with the MOH staff and other stakeholders. However, due to the

country conditions in Myanmar, WHO implements programmes (acute flaccid paralysis surveillance, tuberculosis) and supports routine operations for these programmes (supplies, supervisory visits).

WHO emphasizes the need to have a plan of action that is:

—   relevant to the priority needs in public health in Myanmar, and

—   aligned with WHO corporate interests, in particular, the general Program of Work (WHO 2006), regional directions (WHO-SEARO 2004), and the Country Cooperation Strategy (2002-05, revised in 2008).

The WHO plan of action 2006-2007 became operational in January 2007. It contains about 1200 activities, including 800 contracts, spread in 29 different areas of work. Those related to the main events of infectious diseases and epidemics in this study are:

—   EPR (SARS and human pandemic influenza)
—   Vaccine-Preventable Diseases (polio and measles)
—   Tuberculosis
—   Malaria (malaria and dengue)
—   HIV/AIDS

Annex 15. Organization of the Myanmar section

Myanmar

events
- importance & significance
  - hazard
  - mitigation strategy
  - high incidence
  - disease burden
  - evidence
    - population denominators
    - surveillance system capacity
    - official disclosure of situation
- country context
  - situational
    - limited resources
    - hard-to-reach populations
    - culture & tradition
  - MOH factors
    - Capital moved to Nay Pyi Daw
    - disclosure and action
    - dedication of health staff
  - politico/administrative factors
- stakeholders
  - criticism
  - accuracy of reporting
  - understanding mandates/roles

results
- meaning
  - programmatic
    - shorter term
    - longer term
  - events results
    - end in itself
    - within a framework
    - means to achieve other things
  - "non-results"
    - failure to control outbreak
    - lesson for improving future
- WHO contribution
  - six core functions WHO
  - "core presence", "being there"
  - operational & financial support
  - "if WHO were not"
    - relative disruption
    - tough situation
    - disastrous situation

WHO country team
- organisational profile
- planning process
- performance assessment
  - individual performance
  - plan of work
    - financial & activity monitoring
    - quality of work & outcomes
    - ill-assessed work
    - other concerns
  - programmatic
    - technical missions
    - external evaluations
  - appreciation of tools
    - administrative accountability
    - managerial compliance
    - policy development support

Annex 16. Country background information: Nepal

Country

Nepal is a landlocked country between China and India, and a large proportion of its area is hilly and mountainous (Figure 16). Nepal has a population of 27 million inhabitants, of whom 31% live below the poverty line. Nepal is the poorest country in South Asia and the 12th poorest in the world. Ten years of conflict ended in November 2006 (WHO-Nepal 2007).

Figure 16. Map of Nepal

Source: WHO www page: https://www.cia.gov/library/publications/the-world-factbook/maps/np-map.gif

Despite its progress in health status and living standards of the population relating to life expectancy, total fertility rate, child immunization, adult literacy and access to health care, Nepal faces persistent problems of infectious diseases, along with emerging epidemics and upward trends of lifestyle related to non-communicable diseases.

Nepal witnessed a historic political change in November 2006, when the Maoist rebels who had waged a decade-long bloody insurgency (Kumar 2005), agreed to confine their fighters to camps, lock up their weapons, form an interim government, and hold elections for a Constituent Assembly by June 2007. On 21 November 2006, the Government and the Maoists signed a comprehensive peace accord, and on 28 November 2006, they signed an arms accord. With the promulgation of an interim constitution on 15 January 2007, Nepal turned from a Hindu kingdom into a secular state, with the role of the monarchy being suspended (Encyclopædia-

Britannica 2008). The Government postponed the elections scheduled in November 2007 for a Constituent Assembly until Spring 2008.

Nepal restored its Parliament and democracy in April 2007. Under the new Government, the Ministry of Health and Population[51] (MOH) declared health as being a fundamental human right of the Nepali people. It developed a three-year interim plan to "improve the health status of all the Nepalese population with provision of equal opportunity for quality health care services through an effective and equitable health system...". The Plan will be enforced through the Essential Health Center Services package in district level and below. This package includes twenty interventions, categorized into four broad areas, including a) Family planning, safe motherhood and neonatal care; b) Child health; c) Communicable disease control; and d) Out-patient care. The Government started providing free health services to the poor, socially disadvantaged, women and indigenous people, and plans to expand these by promoting corporate social responsibility of the private sector.

Addressing infectious diseases

The protracted armed conflict and frequent natural disasters have increased the magnitude of health needs, while decreasing the capacity of the health system to deliver essential services. Many districts in the lowlands have become increasingly vulnerable to flooding, and therefore to risks of water- and vector-borne diseases (WHO 2005). In particular, health facilities lack sufficient skilled personnel, equipment, or essential drugs. The study that the Department of Epidemiology and Disease Control Division and WHO conducted in 2007 identified the need for training in post-disaster surveillance and needs-assessment among health staff. Additionally, outbreaks of malaria in a number of areas require increased prevention and control measures (WHO 2008).

The MOH, through the Epidemiology and Disease Control Division, deals with most of the major events relevant to this research[52].

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[51] This document refers to the Ministry of Health and Population as MOH, generic term for Ministry of Health.
[52] Including surveillance and response, disaster preparedness and response, disease control (except for those under the programme on Vaccine-Preventable Diseases), zoonotic diseases, malaria, visceral leishmaniasis, human (avian) influenza, and others. The national plan on Dengue and the preparedness plan to address human (avian) influenza started in 2006, although they are not functional. A national plan on antimicrobial resistance started in 1999, although the extent of the antimicrobial resistance problem is unknown.

The Early Warning and Reporting System started in the year 1999 and ran actively until 2003 with support from USAID (Pyle, Nath et al. 2004). It focuses on malaria, visceral leishmaniasis, dengue, cholera, and influenza-like illness. At present, there are 17 facilities reporting under this schema throughout Nepal, although their weekly reports have become erratic. The Early Warning and Reporting System links to the programme on Vaccine-Preventable Diseases since both survey the same diseases, such as neonatal tetanus or measles. In addition, the Heath Management Information System ensures the routine collection of data with monthly reporting.

Several of the major events that the interviewees put forward are addressed through national programmes (Table 21, page 212). All these national programmes are well established and well resourced, and are governed through inter-agency/multi-stakeholder country coordination mechanisms. Other events are dealt with through ad-hoc epidemic or "crisis" committees.

Visceral leishmaniasis is included in the Early Warning and Reporting System, despite recommendations to remove it, based on its low epidemic potential (Pyle, Nath et al. 2004). Visceral leishmaniasis affects poor populations in remote areas and various stakeholders work with the MOH on the identification of a national plan to deal systematically with this disease. However, at present, the control is through specific projects in the affected areas (Rijal, Koirala et al. 2006).

The Central Epidemiology Unit carried out a study on the performance of the national system on communicable diseases surveillance and response in July 2007. The results of this study identified the gaps and bottlenecks of the current system and recommended improvements[53].

Nepal's health system is well supported by "External Development Partners" (UN 2008). These include agencies that have signed a Statement of Intent to cooperate in a sector-wide approach. The MOH chairs the Health Sector Development Partners Forum, a mechanism for stakeholder collaboration. Moreover, the partners meet at the bi-annual sessions of the Joint Annual Review, to review the performance of the sector during the previous year, and to agree on the forthcoming year's work plan and budget. Nepal is also part of the International Health Partnership. This partnership, established in September 2007, aims to make aid more effective by getting donors to work together to meet the health priorities in seven selected countries (DFID 2008).

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[53] Results presented at a national workshop in October 2007, Kathmandu.

Table 21. Major events of infectious diseases and epidemics mentioned by interviewees and selected characteristics of the national programmes# to address them, Nepal 2007

Event/Epidemic	Control programme	Coordination mechanisms
Cholera/ Acute gastroenteritis	Under diarrhoeal diseases. Under Primary Heath Care.	Ad-hoc emergency committee if epidemic declared.
Malaria	National control plan.	Inter-agency group under Global Fund country coordination mechanism.
Dengue*	Plan not clearly outlined yet	Ad-hoc emergency committee if epidemic declared.
Japanese encephalitis	National plan.	Inter-agency coordination committee, Vaccine-Preventable Diseases@.
"Avian flu"/Pandemic influenza preparedness	Inter-ministerial plan established in 2006.	Intersectoral committee. World Bank funding.
Tuberculosis	National plan.	Inter-agency group under Global Fund country coordination mechanism.
Measles	National plan.	Inter-agency coordination committee, Vaccine-Preventable Diseases.
Visceral leishmaniasis	No national plan yet.	Intervening agencies coordinate with MOH.
Anti-microbial resistance	Program since 1999.	Extent of the problem not identified yet.
Hepatitis E	Under diarrhoeal diseases.	*Ad-hoc* emergency committee.
HIV/AIDS (after prompting)	National plan (2006-2011).	Inter-agency group under Global Fund country coordination mechanism.

\# = under the 9th Five-year Plan
* = and dengue hemorrhagic fever
@ = Vaccine-Preventable Diseases

More than 10 major international development partners contribute to 40% of the public health expenditure in Nepal (£ 39 million annually). However, the number of separate projects, together with attendant monitoring reports, review missions and technical support, place a huge burden on the MOH:

> "This International Health Partnership is not about money. It is about working better and smarter to ensure that aid is used in the most effective way. Its signatories have agreed that in order to accelerate progress to meet the health Millennium Development Goals we must improve coordination between donors, build sustainable health systems, and donors must be unified behind countries' own health plan." [17]

In addition, the Emergency Health and Nutrition Working Group works with the MOH and the Ministry of Home Affairs to respond to any health and nutritional emergency through coordinated national and international support.

Nepal is a member of the South East Asia Association for Regional Cooperation. This Association is involved in addressing specific infectious diseases, through its center in Nepal for the monitoring of resurgence of tuberculosis (DaSilva and Iaccarino 1999).

Annex 17. Organization of the Nepal section

Nepal

events

- importance & significance
  - Importance
    - disease burden
    - high incidence
    - affect underprivileged
    - emerging situation
    - newly uncovered disease
    - available evidence
  - significance
    - political impact
    - program start-up
    - reveal program needs
- country context
  - situational
    - poverty & underdevelopment
    - hard-to-reach populations
    - culture & traditions
  - MOH factors
    - responsiveness
    - capacity to deliver
    - decentralisation process
  - politico/administrative factors
    - political process
    - country stability/security
- stakeholders
  - coordination networks & SWAP
  - mandates & roles
  - expectations & sustainability
  - day-to-day cooperation issues

results

- meaning
  - programmatic
    - shorter term
    - longer term
    - efficiency/decentralisation
  - events results
    - end in itself
    - process or framework
    - means to achieve other things
  - "non-results"
    - situation not dealt with properly
    - lesson for improving future
    - "results were fully achieved"
- WHO contribution
  - six core functions WHO
  - "core presence", "being there"
  - operational & financial support
  - "if WHO were not"
    - limited disruption, "others would do"
    - great loss, tough situation
    - disastrous situation
    - "Difficult to imagine or say"

WHO country team

- organisational profile
  - location & office space/s
  - composition
  - structure
    - working relations
    - referral
- planning process
  - participation & consultation
  - timing
  - source of funding
- performance assessment
  - individual performance
  - systems & procedures
  - plan of work
    - implementation
    - contribution to Nepal health system
  - programmatic
    - external evaluations
    - benchmarking
  - appreciation of tools

Annex 18. WHO contribution to addressing major events and epidemics, by stakeholders (N=19) and type of contribution, Nepal, 2007

	Leadership & partnership development	Evidence Policy development	Application of norms & standards	Research & knowledge application	Technical assistance & capacity bldng	Health analysis & trends	Routine support	Logistic support	Equipment & supplies	Operations	Advice to others	TOTAL individual elements	TOTAL grouped comments	
Provision of policy framework	1NAT, 1MOH, 1WHO, 1INT	1INT			3MOH, 1INT					1MOH		10		Total by core functions = 108
Accurate information/ link global policies	1INT		1INT								1NAT, 3INT	6	16	
Technical assistance	1NAT, 3MOH, 4WHO, 2INT	1NAT, 2WHO	1NAT, 4WHO	1MOH, 2WHO	1NAT, 4MOH, 1WHO, 5INT	1MOH, 2INT		1INT	1INT	1NAT, 3MOH, 1INT	1NAT, 2INT	45		
Institutional development	2MOH, 2WHO, 2INT	1MOH	1NAT, 3WHO	1MOH	1NAT, 7MOH, 2WHO, 4INT						1NAT, 1MOH, 2INT	30		
Emergency and/or epidemic response	1WHO, 1INT				2MOH, 1WHO, 1INT					1MOH, 1INT	1INT	9	84	
Training of RRTs					1MOH, 1WHO, 2INT							4		
Fellowships and Training of staff					3MOH, 1WHO							4	8	
Laboratory services support			1INT				1MOH	1MOH	1MOH	1MOH		5		Total routine support = 51
Medicines, kits, equipment supply							4MOH, 2WHO, 1INT	3MOH, 1WHO, 2INT	3MOH, 1INT	6MOH, 1WHO	1INT	25		
Financial support					3MOH		4MOH, 2INT	3MOH	1MOH	1NAT, 6MOH, 1INT		21	51	
Presence, "WHO is always there"	2NOH, 1WHO				3MOH, 1WHO					1MOH		8		Total others = 44
Working closely with MOH	1NAT, 5MOH, 1WHO, 3INT				4MOH, 2WHO, 2INT	1MOH, 1WHO, 1INT				1NAT, 3MOH, 1INT		26		
Dialogue, passing message across	2WHO, 2INT				2MOH, 1WHO, 2INT						1INT	10	44	
TOTAL by Core functions	40	5	10	5	61	6	14	11	7	30	14	203	203	

TOTAL by routine support 32

TOTAL other support 44

Annex 19. Selected aspects by programmes on communicable diseases programme - Notes from the WHO Collaborative Programme Evaluation, Nepal, 30-31 October 2007

Program	Contribution from others	Constraints	Limited resources	Other stakeholders	Policy remarks	Operational research	Issues with focal point	Other issues mentioned*
Epidemic Preparedness & Response	Mentioned	No articulation policy	Yes, for initial phase of epidemic responses	Yes, e.g. INGOs and NRC only for epidemic responses	Yes, linking to operational research	Assessment of core capacities. Weak capacity within public health sector	No	NEP 07: 150 outbreaks. WHO assisted 15-20. Journalists trained in risk communication. Policy decision: HIS articulation w/other running programs & integration. Critical pillars and policy framework developed. Three-Year National Health Plan does not include EPR/CSR as priority
Tropical Diseases, zoonoses	Yes, well developed	Poverty Underdevelopment	No mention	NGOs, municipalities, EDCD, etc	Kala-azar vision on policy dev.	Sur.Adv.Eff for lymphatic filariasis Rabies control	M&E at MOH is lacking	Yes, linked to policy frameworks, MDGs. Partnerships with municipalities, e.g. dengue is urban. Kala-azar important in border with India and Bangladesh
Laboratory services	Mentioned	NHPLS not stable, ad-hoc. As AMR	Implemented/ reprogrammed	Only support from WHO	No mention	Labo network & Anti-microbial resistance	Dir Rsrch Inst unavailable	Development of regional PHL network needed; Plans to enable outbreak response at selected PHC
Immunization Preventable Diseases	Yes, well developed	Little sustainability. NID 100% outside $	No mention	Yes	Measles, rubella, JE	Yes, now baselines	No	Lack of decentralised laboratory services. Lack of staff working on surveillance at MOH, and districts. JE, rubella, measles, polio, Neonatal tetanus, Hib, EPI
Malaria	Yes, well developed	Need to shift to community based surveillance	No mention	Yes, PSI, GF, MOH, WHO, well done	HMIS facility>> community based	Yes, no baselines	Gaps in HRH & in IEC	Stressed needed M&E and external evaluations. EWARS is not functional. Need to develop HMIS for surveillance. Case definition is not in line with WHO
Tuberculosis	Yes, well developed	Technical challenges	Yes, more $ needed	Focus RO/HQ, etc	Yes, to global policies	Multiressistant TB	No	Expanding DOTS+. Practical approach to lung health piloted 2 districts. Emphasis on M&E; interaction private sector, HIV.
HIV/AIDS	Well developed	No mention	No mention	Yes	As an issue	Yes	No	Emphasis on M&E
Leprosy	Mentioned	No mention	No mention	Yes	Global>>NEP	IEC for policy Validation treatment	Good focal point	"WHO provides only technical assistance and funds. Rest is provided from MOH"

* = Several participants referred to the strike of health workers, the "Maoist problem", and Government infrastructure as challenges when addressing infectious diseases in Nepal.

Annex 20. Assessment of the tools to assess EPR performance routinely, Myanmar and Nepal, 2004 - 2007

1. *Myanmar*

a. What the WHO plan of action for EPR is set out to deliver

The WHO plan of action is expected to "improve the national and sub-national capacities for disease surveillance and EPR" (2004-05), and to "support the MOH to implement the integrated disease surveillance and EPR, and to implement IHR" (2006-07).

b. Terms and boundaries of collaboration

In both bienniums, the plan of action refers to capacity building. In 2004-05 it speaks about outcomes ("improved national and sub-national capacities..."), while in 2006-07 there is a single expected result. It is worded as an output ("support the MOH to develop and implement...").

In both bienniums, the expectations of the plan of action refer to the MOH. Thus, implicitly this sets the WHO plan of action in EPR as a bilateral collaboration between the MOH and WHO.

There is no mention to other stakeholders, such as NGOs, private sector, other sectors than health, or other international partners. The plan of action 2006-07 is more explicit and mentions only the MOH.

c. logic framework approach

The plan of action 2004-2005 includes six products to achieve the expected results. These six products include the development of plans, guidelines and tools; strengthening capacities in critically strategic areas (field epidemiology, mapping, and lab diagnosis); and operational research (one systems research, and one applied lab research). The plan of action includes two other products formulated as routine support to operations carried out by the MOH (surveillance and diagnosis/containment).

All the above components of the plan 2004-2005 are indispensable to the public health system when dealing with infectious diseases of high epidemic potential. However, the plan of action does not mention other critical components. These include the logistics and operational means at all levels, a contingency stock for EPR, and an EPR emergency fund.

The plan of action 2006-2007 includes two products to achieve its expected result. The first product refers to supporting the national plan on integrated disease surveillance. The second product refers to "improving the capacity (of the MOH) to implement the IHR ..."

The plan of action 2006-2007 is broad. It refers to intermediary functions, without further reference to the components of the EPR system, or the basic core capacities to implement IHR.

In both plans WHO has a supporting function for all products. The provision of technical assistance is not mentioned in the plan of action, except in the 2006-2007, referring to a mission of the regional office in the framework of the implementation of IHR.

d. Indicators, baselines and targets

There is no benchmarking of the EPR program, and therefore the indicators of progress relate to the products of the plan of action of each biennium, without continuity among them.

The formulation of indicators varies. At times indicators relate to the presence of a report in which the baseline is 0 and the target 1. In this case, the product constitutes the output without further indication of its impact in terms of health policy application. For example:

Product: Bacterial pathogens and antibiotic sensitivity in children with acute respiratory infection identified.
Indicator: report
Baseline: zero
Target 1

Other times indicators are the expression of a process within the health policy continuum:

Product: Capacity strengthened in field epidemiology, public health mapping, and laboratory diagnosis of epidemic prone diseases.
Indicator: Number of outbreaks investigated or reported at state/divisional units
Baseline: 12
Target: 24

All eight indicators in the plan of action (five in 2004-2005 and three in 2006-2007) refer to the products for which the MOH is the agency accountable. None of the indicators refers to the WHO performance in ensuring that these results are achieved.

e. Mid term assessment

There is a self-assessment on the status of the plans, with an overview and comments. In both bienniums, the status is "green" or "fully achieved". Both biennium assessments focus on administrative procedures (submission of MOH contracts to WHO). The assessment mentions issues related to the implementation of the plan of action (WHO having delay in disbursement of funds), and to process progress (implementation of activities).

The mid term assessment of the plan of action 2006-2007 refers to the Avian and Human Influenza Preparedness and Response Plan. This Plan started after the plan 2006-2007 had been approved and therefore progress is reported without necessarily being integrated in the products of the plan of action.

f. End of Biennium Assessment report

The report for 2004-2005 reports on successful achievements. For example, "any zoonotic disease successfully controlled preventing to become an outbreak", or "developed a health mapping and early warning system for epidemic-prone diseases". The key constraint that the report mentions is "due to many emergency and ad-hoc issues the implementation of activities was delayed".

The report format does not call for lessons learned. It further recommends that 50% of the budget of WHO contracts be paid upfront.

The report for 2006-2007 refers to using the Avian and Human Influenza Preparedness and Response Plan as an entry point to strengthen core competencies under the IHR framework. It specifically mentions linkages to cross border collaboration, in particular with Thailand.

The report outlines four lessons learned:

- need to prioritize epidemic prone diseases,
- importance of inter-sectoral collaboration in dealing with zoonotic diseases,
- importance of integration with regional and global frameworks for emerging infectious diseases, and
- need for the three levels of WHO (headquarters, regional office, Country Office) to support IHR work in country.

The assessment recommends conducting a needs assessment and to adapt the WHO support to the prioritized needs, to mobilise resources for the IHR country specific workplan, and to enhance regional and cross-border collaboration to address emerging diseases.

The assessment mentions the adaptation of the traditional 2-year field epidemiology training to shorter course to respond to most critical needs of health staff.

2. *Nepal*

a. What the WHO plan of action for EPR is set out to deliver

The WHO 2004-2005 plan is expected to support the in-country plan of integrated disease surveillance (as part of a WHO Regional Plan), and the management of outbreaks and national capacity building. The plan 2006-2007 includes the provision of technical support for policy development, inter-sectoral collaboration mechanisms to fight emerging diseases identified, and national capacity built at central, regional and district level to implement the IHR(2005).

b. Terms and boundaries of collaboration

In both bienniums WHO emphasizes the provision of technical support as well as national capacity building. The provision of support to manage outbreaks and to assess the national capacities in disease surveillance is clearly specified as well.

The plans of both bienniums are inclusive of stakeholders working on emerging disease, and there are indicators on inclusiveness of partners and inter-sectoral collaboration built in the plan of action.

c. Logic framework approach

The plan of action 2004-2005 includes four products to achieve the expected results of the plan. One refers specifically to the provision of WHO technical assistance. The rest relate to policy development, capacity building, and support in managing outbreak responses.

The plan 2006-2007 includes 12 products, of which, five directly linked to policy development and one to advocacy for addressing emerging diseases. In addition, there are two products related to assessing the national situation to develop the EPR policy, and two on capacity

building. Finally one product refers to provision of technical expertise in the area of EPR, and one to supporting operations (outbreak responses).

The WHO support to EPR in Nepal is focused on policy development and on capacity building. It includes operational support and operational research. It reflects the support needed in an early phase of policy development, with specific mention to the various components of the surveillance system, and the need to integrate them.

d. Indicators, baselines and targets

The indicators, baselines and targets are well defined. They are measurable and accurate, and relate to the product and expected results of the plans of action.

Most of the indicators reflect outcomes of EPR at national level, e.g. number of districts implementing a plan to respond to emerging diseases.

e. Mid term assessment

There mid term assessment outlines the achievements and constraints for each of the products of the plan of action, and self-assesses the progress in each product.

The assessment mentions progress and obstacles in implementing the policy changes (e.g. legal obstacles encountered) about the implementation of IHR. It does not refer to the national capacity or to operational difficulties to implement the WHO plan of action.

f. End of Biennium Assessment report

The report for 2004-2005 assesses progress of the national EPR policy and plan. It refers to achievements and key constraints to the national EPR programme, and not necessarily limited to the WHO plan of action. For example, it refers to an external evaluation of the surveillance system that would inform EPR policy. While WHO collaborated in this evaluation, it was not one of the activities of its plan of action. The assessment refers to the external factors that have influenced the implementation of the plan of action, such as the lack of clear managerial and core functions responsibilities for surveillance in the public health sector. It refers to other factors directly related to the plan that delayed/made it necessary to reprogram activities. In particular the plan of action mentions the need to accommodate the activities related to the pandemic influenza.

The assessment makes recommendations for 2008-2009 based on the results of the operational research on the surveillance capacity of the public health sector conducted during 2006-2007.

The report emphasizes the need to work with other countries and in border areas to deal with the risk of emerging diseases. It also refers to the need for the public sector to assume its functions in surveillance as a pre-condition for integrating the various disease surveillance systems.

The report mentions the difficulty in starting the training in field epidemiology in Nepal. This training is considered indispensable to strengthen the national capacities in surveillance. However, the resources that starting such a program require are not available.

3. Concluding remarks on the routine performance assessment in each country

In the case of Myanmar the assessment of the plan of action focuses on the assessment of the implementation of its activities at output level.

In the case of Nepal the assessment of the plan of action refers to the national EPR system and what is needed to improve it. It contains more insights into the opportunities and challenges of EPR development that the assessment of the plan of action of Myanmar.

The plan of action of Nepal focuses more on supporting policy development and technical assistance, while that of Myanmar emphasizes more concrete activities. The focus of attention of the WHO plan of action in both cases is the national EPR plan. However, in Myanmar the counterpart is the MOH, in Nepal there is explicit mention to include all stakeholders.

The implementers of the WHO plan of action in Nepal include WHO staff (provision of technical assistance, support in outbreak management, operational research), while in the plan of action in Myanmar the main implementer is the MOH staff. In both cases the main recipients of the plan of action are the national health staff. However, while in Myanmar the WHO support is handled through contracts through the MOH or national institutions, in the case of Nepal the WHO support is handled directly to the MOH staff and through NGOs as well.

None of the plans includes benchmarking indicators of an standard WHO support to these programs, or benchmarking indicators for the EPR or the implementation of the IHR in countries.

4. Common issues in Myanmar and in Nepal

In both countries there is mention to:

Difficulties in finding resources for the FETP
Need to work with other countries and border areas
Need to work with regional initiatives networks
Develop national capacities

The pandemic influenza being an opportunity to develop EPR at country level
Success with training of Rapid Response Teams