

GAVI Health System Strengthening Support Evaluation

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Yemen Desk Study

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Acronyms and Abbreviations

APR	Annual Performance Review
EPI	Expanded Program for Immunization
GAVI HSS	Global Alliance for Vaccines and Immunisation Health Systems
	Support
GNI/cap	Gross national income per capita
GoY	Government of Yemen
HSSCC	Health systems strengthening coordinating committee
IRC	Independent Review Committee
JICA	Japan International Cooperation Agency
MDG	Millennium Development Goal
MMR	Maternal mortality rate
MoCSI	Ministry of Civil Service and Insurance
MoF	Ministry of Finance
MoLA	Ministry of Local Administration
MoPHP	Ministry of Public Health and Population
NGO	Non Government Organisation
PHC	Primary health care
PMU	Program Management Unit
SWAp	Sector Wide Approach
U5MR	Under five mortality rate
UNDP	United Nations Development Program
USD	US dollars
WHO	World Health Organisation

Summary of Key Findings, Conclusions and Recommendations

Yemen's GAVI HSS plan is very ambitious and highly relevant in view of the present (pre-GAVI HSS) state of its health system. The analysis in the plan of bottlenecks for improving immunisation and results in achieving MDG 4 and 5 describe a situation in which the following problems need to be solved:

- 1. The setting of the health problem structure is that of a widely disbursed and poor population in which demand for services is hampered by culture/gender related problems, lack of transport (including cost of) and non-availability of operational health institutions.
- 2. Institutions for primary health care have very low productivity and reach only a fraction of the population they are aiming for.
- 3. Activity in primary health care institutions is fragmented and often only partial due to strong vertical separation of health programs.
- 4. Planning and implementation of the public health sector has been focused on development of infrastructure; for which staff, economic resources and support/ supervision has been unavailable.
- 5. The general system of management has been weak on all levels but particularly on district and province level.
- 6. Efforts to build a decentralised system of health service provision are handicapped by unfinished regulatory efforts.

The GAVI HSS Yemen plan sets out to create a "**unified model**" through the use of an initial "operational research phase" in which all these problems are addressed with an interlinked and comprehensive system reform. In this reform (as reflected in the GAVI HSS plan):

- (i) Outreaches are the fundamental element for health service provision in severely underserved rural areas covering health needs of more than 50 % of population;
- (ii) The governance and management model has a district management setting which will be developed within the framework of the plan;
- (iii) It will necessitate integration of many vertical system elements affecting both decentralisation problems in general and the modus operandi of the health sector specifically (budget system, medical guidance, monitoring)
- (iv) The unified model will address the productivity issues and incentive structures and make much better use of female staff.
- (v) The model will initially be applied to 64 districts representing 30 % of the Yemeni population.

A success in implementing the plan will significantly increase Yemen's chances of reaching MDG's on health. It is from the outset very much in line with the general objectives of GAVI HSS. A failure to implement it could, on the other hand, frustrate reform efforts for a considerable time.

The Yemeni plan is highly demanding from the point of view of implementation; thus it includes considerable risks. The implementation problem is particularly associated with the fact that the plan is "a unified concept" of ideas which at the outset are just concepts in need of considerable further development during an "operational research phase" before they can be translated into practical – interlinked and comprehensive - solutions. A delay in elaborating these concepts is to be expected since precious little time has been set aside for their development in the operational research phase. Stewardship of considerable strength is needed to make all the interlinked features function harmoniously. A failure in the concept development process will have a very negative effect on all aspects of plan implementation.

The Yemen GAVI HSS is presently in its early implementation phase. Considerable delays in implementation indicate delays due to the complex structure of the plan. Thus it is too early to state whether the Yemen plan is "on" or "off" track.

This desk review study cannot meet the same standards of detail and comprehensiveness expected from a full case study. In particular the following weaknesses need to be considered by the reader:

- 1 It has a central perspective, while much of the realities of a health system are local.
- 2 The absence of interviews with a range of stakeholders means the findings might not be truly representative.
- 3 Reflections and judgements are mostly based on plans rather than actual implementation. A certain level of "wishful thinking" need to be accounted for as long as there are few hard nosed observations of implementation.

The applicants have demonstrated considerable willingness to meet with the general GAVI HSS principles. Conclusions on each of the GAVI HSS principles can be summarised as follows:'

Principle	Conclusions on Yemen adherence to principle		
Country driven	Yemen application has clear relation to political priorities in Yemeni health policy documents. The process of building application – although supported from outside – is in the hands of Yemeni authorities		
Country aligned	Strong efforts to integrate Yemen implementation process with general regulatory system. Since this system is not fully developed and since management capacity is limited the country aligned system could experience problems		
Harmonized	Pre-GAVI HSS development partners were not working harmoniously with government, GAVI HSS process has contributed to progress in this respect		
Predictable disbursements of funds	The basis for the application are relatively loosely formulated concepts to be developed into more concrete strategies and policies that at a later stage of plan implementation are to be supported with training, incentive structures, regulatory reforms etc It could be difficult to streamline the GAVI disbursement timetable to this complex structure.		
Additionality	No indications of additionality problems		
Inclusive and collaborative	Lack of involvement of private sector is negative. Clear emphasis on gender issues positive as are efforts to co-ordinate with the decentralised structures		
Catalytic	Catalytic effects are possible – but will depend on outcome of implementation process		
Innovative	The strong focus on outreaches to meet broad health needs in a "de- verticalized" manner goes further the many other countries efforts of PHC reform		
Results oriented	Incentive structures are important elements of the plan.		
Sustainability conscious	It is not clear if an effective analysis of financial sustainability has been made. Problems of work force sustainability also deserves more in depth analysis		
Poverty focus	Clear poverty focus		

A general ambition of the evaluation of GAVI HSS has been to make – in each of the studies of GAVI HSS countries – an analysis of what would have happened if not GAVI HSS funding had existed. Clearly this question cannot be answered without a full understanding of the progress made in implementing the GAVI HSS in Yemen. A speculative effort to discuss this matter would be to state, that no alternative to GAVI HSS has been in sight in Yemen. It seems to have vitalized strategic thinking on health policy.

The analysis GAVI HSS planning and implementation in the Yemenite context raises a number of general GAVI HSS design questions:

Strategic GAVI HSS design and role questions raised	Recommendations	
Is a sufficiently qualified risk analysis part of the review process?	The Yemen case indicates a form of "risk thinking" from IRC – but it is not applied in full and a rather general answer to IRC questions did not lead to "follow ups". The GAVI Alliance Board seems to have accepted the answers from Yemen in spite of them not being very specific A general "risk approach" in the review process is recommended.	
Does the design of the review process of the application process meet the special requirements for analysing a "unified model"?	In general the review process seems to be better adapted to project style applications. The review process could be styled more individually to the specific situation in the applicant country. Uniformity is not necessarily a value.	
Does the present model of implementation monitoring and review (through the APR process and the IRC review of APR's) meet the requirements of monitoring a "unified model "	As stated above – unified models may call for a specific model for implementation support that could be drawn up already during the process of application review	
Does the unified model require the same type of approach to implementation as more project style applications do?	These are entirely different models and need more selective approaches to implementation	
Is it reasonable to require a detailed analysis of financial and work force sustainability in the application? How should IRC react on these issues in their review of the application?	An improved sustainability analysis could be integrated in the "risk analysis" discussed above. That would require a broader mandate and increased resources for the IRC	
What could be particularly important to follow up in the 2012 evaluation of GAVI HSS?	Using the experiences from Yemen, emphasis should be on implementation to establish under what circumstances which forms of implementation of GAVI HSS may lead to decisive improvements in health status of the population. An analysis of <u>country context factors</u> for successful implementation needs to complement the <u>probe of GAVI HSS design factors</u> . This could create a framework for a discussion on a more country specific approach to Global Health Initiatives.	

1 Scope, Approach and Methodology

1.1 Brief conceptual framework of the Evaluation

This evaluation is being conducted to inform three areas of decision making:

- 1. The Board decision in 2010 about whether or not to increase the funding available to the GAVI HSS window
- 2. How to improve current and future implementation
- 3. To enhance the quality of the 2012 evaluation

It is important to note, given the little time elapsed since the first HSS applications were approved in 2006 will focus primarily on issues linked to: proposal design; approval and review processes; processes and outputs involved in grant implementation and annual performance review; and assessment of activity and outputs achieved to date. The study will also reflect on the nature and quality of global, regional and national technical support systems delivered by a range of stakeholders in support of HSS grants. The conceptual framework for this evaluation is shown in Figure 1.



Figure 1 The conceptual framework - logical progression from inputs to impact

Our priority questions have been summarised in Box 1 below.

Box 1: Examples of Questions for the HSS Evaluation Study

- Is GAVI HSS on track to achieve what it set out to (in general and in individual countries)? If not, why not? How might GAVI HSS be improved?
- What would have happened if GAVI HSS had not been created? Is it additional money and does it add value to existing ways of doing business?
- Are the "right" bottlenecks being identified i.e. are they priorities and relevant to the desired outcomes?
- Are design and implementation processes consistent with GAVI principles?
- What factors can be linked to countries being on- or off-track?
- Are HSS-related monitoring frameworks well designed? Do they measure the right things? Are they being appropriately implemented? Do they take into account country capacity to deliver?
- Are they consistent with existing country monitoring frameworks? Where they differ, what value is added and at what expense in terms of extra transactions costs?
- What do we know about outputs and outcomes? How realistic is it to try and attribute improved outputs and outcomes to GAVI support? What are some of the key contextual factors which influence results?
- How sustainable are the results likely to be?
- What have regional and global support mechanisms delivered?
- What effect have they had how could they have been improved?
- What should the 2012 evaluation cover and what need to be done now to support it?

1.2 Approach to the Yemen Deeper Desk Study

The Yemen Deeper Desk Study uses a combination of document review and e-mail questioning in order to gain insights into how GAVI HSS funding has support health system strengthening more generally in the country. Both the document review and interviews took place in July 2009. Annex 1 provides a list of resources used for the Yemen desk study.

2 General background to application for Yemen's GAVI HSS funding¹

Yemen, with a population of 21 million, is a low to middle income country with a GNI/cap in PPP US dollars considerably above 2000 (870 USD/cap in current exchange rate) thus in a better situation financially than neighbouring African counterparts but far behind its two closest neighbour's - Saudi Arabia and Oman.

The status of Yemen's health and health system **pre-GAVI HSS** can be summarily described as follows:

The health situation was in line with what can be expected judging from its economic situation. Infant mortality is 75/1000 (2005). U5MR is 102/100 (2005). MMR was 430/100000 (2005). Health development was moderately positive with a 1.7 and 1.9 average annual percentage reduction of IMR and U5MR respectively over the last 10 years

Demand side challenges: Severe gender/culture related problems were amplified by a widely dispersed and very poor rural population, low literacy levels and severe transport problems.

Supply side challenges: the widely dispersed population in the predominantly rural areas of Yemen had created major problems for building an efficient PHC provision structure; staff productivity was often very low; absenteeism was widespread; dual employment was frequent; serious competence/capacity problems at facility were related to lack of integration between vertical programs; relatively few PHC units offered "all-program-services". Availability of drugs and equipment was often very limited. Lack of staff was very common in PHC units. High levels of investment in building of PHC units were not supported by recurrent costs in budget or availability of staff. Thus many PHC units undertook little or no activity. Private services – much more numerous than public services – were mainly available in urban areas. Private services provided about 75 % of all health services. EPI outreach model shows good results with DPT/PENTA coverage of 85 %.

¹ The documents mentioned as essential reports in the application have been studied for this background review. The main sources have been "The third Five year plan for health development and poverty reduction 2006-2010"MoPHP, no date; "Public Expenditure Review, Health Sector Republic of Yemen. 1999-2003" USAID Bethesda 2006; "Health Sector Development in Yemen, Making Choices" Royal Tropical Institute, Amsterdam 2004; "Sector Decentralisation and Functional Assignment – Support Study for the formulation of a National Decentralisation Strategy", UNDP and Ministry of Local Administration (MOLA) 2006; "Health Sector Reform in the Republic of Yemen, Strategy for Reform" Ministry of Public Health Yemen, 2000;

Governance: Devolution to provinces and districts is relatively new and was initially not functioning well. Ministry of Finance controlled finances down to low levels of government even after decentralisation. The regulatory completeness of the devolution process was low. There was a lack of management/stewardship capacity at all levels but particularly at district level. The strong position of vertical programmes, run from the Ministry of Public Health and Population (MoPHP) were not in harmony with the devolution strategy. Implementation of strategies and policies pre-GAVI HSS were not working well. Budgeting and budget implementation may have been partly disconnected from plans and strategies. Integration of donor activities with public sector activities – pre-GAVI HSS - was not functioning well. The private sector developed independently and rapidly while competing for limited staff resources. Regulation and oversight of the private sector was limited. Comprehensive and accurate data on health and health sector activity were only available intermittently with the management information system (HMIS) in early stage of development. The health sector was also suffering from problems of corruption.

Health strategy development: The third, five-year plan is comprehensive and frank. Costing is included – but it is unclear if is it linked to actual budgeting. Implementation strategies were rare/still missing. The *"large scale regular outreach mobile EPI strategy"* was of particular importance since it has emerged as a highly successful alternative to the problematic "fixed PHC sites" approach. It was later to be seen as a breakthrough to be used as a model for strategic development.

Health financing: There had been a clear increase in government funding over time – but from very low levels and slower than in other government sectors (education, defence). The important *Essential health care package* was not implementable at the existing level of financing. Facilities frequently ran out of money. Cost sharing had become an essential part of health financing. It was debateable if accountability and transparency of cost sharing was sufficient.

3 The Yemen GAVI HSS Application

3.1 The application process

The GAVI guidelines for GAVI HSS applications² cover particularly the following issues:

- Country leadership principles;
- principle of careful preparation;
- principles of stakeholder participation and CSO (and private sector) inclusion;
- the opportunity to access financial support to technical assistance for drawing up the application;
- the principle of using peer review of a suggested application using nine "tick-boxes" before finalisation of application.

The Government of Yemen (GoY) has carefully followed these principles as shown in documents demonstrated in the application.

3.2 The general direction of the application from Yemen

The GAVI Alliance guidelines put the main emphasis on the immunisation objective: "...to achieve and sustain increased immunisation coverage through strengthening the capacity of the health system to provide immunisation..."The guidelines add: "...and other health services (with a focus on child and maternal health)"

The Yemenite application uses - as a model for its main thrust - the considerable progress made through health system support in the area of immunisation. GAVI's main problem – low health system capacity for immunisation - seems to have found an effective solution in Yemen and demonstrated viable results already pre-GAVI HSS. The emphasis of the application is instead on the remaining part of the primary health care system development of Yemen.

The 1998 Health Sector Reform Strategy³ is fundamental to Yemen's five year plan for 2006-2010. Its key elements are:

Decentralisation

² GAVI Alliance Health System Strengthening (HSS) Applications Guidelines March 2007.

³ Ministry of Health Sana'a, Republic of Yemen: *The Health Sector Reform in the Republic of Yemen.* Strategy for Reform

- Redefinition of the role of the Public Sector
- District Health Systems
- Community Co-management
- Cost sharing
- Essential Drugs Policy and Realignment of the Logistics System
- Outcome-based Management System with Integrated Focus on Gender
- Hospital autonomy
- Intersectoral co-operation
- Encouragement of Participation by the Private Sector and NGO's
- Encouragement of Innovation
- Sector Wide Approach to Donor Funding and Programming

The Reform was scheduled for two phases:

- An initiation phase from 1996- 2000 and
- A five year consolidation phase to end 2005

The Consolidation phase was intended to coincide with the second Five-year Plan for Health Development for the years 2001-2005.

As described above in chapter 2, the state of the health sector on the year of the application to the GAVI Alliance is that of *very slow implementation both of the reform package described above and the second Five-year plan.* The third Five-year plan and the analysis of barriers identified for implementing the objectives of the GAVI HSS needs to be seen in the following light: The Yemeni health strategies suffer from difficult implementation problems that the applicant wishes to address in the GAVI HSS proposal.

Nine issues - five of them in bold in table 1 - are singled out as of particular importance because of lack of existing solutions. Four additional issues have made a policy implementation start, but additional funding is needed.

	Barriers and gaps in addressing barriers	Recent measures taken to address these barriers	
1.	Low level of funding	Commitment to increased funding from Government and donors	
2.	Fragmented HIS	USAID and World Bank in support of HIS strengthening	
3.	Poor management skills	Management institutions established and training of district level managers started	
4.	Gender related demand problems Many trained female staff still unemployed but th have recently been prioritised for employment in c service		
5	Low health coverage of widely dispersed population aggravated by inefficient "fixed site PHC units"	Outreach line items introduced in budget, legitimizing outreaches as provision model- (Built on success of EPI outreach model)	
6	Inefficient use of funding for PHC related to lack of vertical integration on programs in PHC units	Integration efforts underway through comprehensive PHC management models on all levels and improved co-ordination between government and donors	
7	Insufficient support to health workers (remuneration/incentives)	Donor support local capacity building efforts (problems with non-co-ordinated donor efforts in this area)	
8	Insufficient mechanisms for translation of central policy intentions through the layers of the health system under the new decentralisation strategy	The EPI outreach strategy, efforts to align MoF to this model and improved district management to bring partial answers to these problems	
9	Poorly coordinated and poorly functioning management and monitoring system	MoPHP committed to reform. Ongoing national health sector review to provide further direction	

Table 1 Barriers of particular relevance for Yemen's application for GAVI HSS

The application document stresses the communality between the nine main barriers and proposes a **single unified model** for formation of the GAVI HSS application to include:

A district model which utilizes an integrated outreach, and results-based approach to improve coverage, management, efficiency and health worker motivation. This model will translate MDG goals into improved health outcomes under a decentralised structure. The unified model shall also incorporate i) the tracking and integration of all available female staff by district; ii) results-based motivational system for health workers and district authorities; iii) incorporation of community based strategies and; iv) the design of financing mechanisms that can be streamlined into the existing decentralization structures.

The picture drawn up in the application coincides in most respects with the general analysis from the strategic documents summarised in chapter 1. This makes the application highly strategically relevant.

In the application from MoHPH the *unified model* for GAVI HSS is presented in the application to be implemented in 64 districts representing around 30% of the total population of Yemen.

A unified model is a very ambitious, but also very complex undertaking. Judging from the nine main barriers, the realisation of the unified model needs to include:

- 1. Reforms of the regulatory mechanisms that links central policy making with "on-theground" implementation;
- 2. development of a radically changed model for health service provision to up to 50 % of the Yemenite population (rural population that is today dramatically underserved);
- questions of systems of planning and budgeting to finalise the Yemen decentralisation process;
- 4. relations between at least four main ministries for decisions affecting health sector governance and financing (MoF, MoLA, MoPHP. MoCSP);
- 5. organisation and administrative engineering models for the MoPHP in a systematically decentralised model (including integration of vertical programmes);
- 6. development of regulatory systems for central medical policy guidance for integrated outreach services;
- 7. strengthening (quantitatively and qualitatively) management on all levels for implementing the outreach model in a reformed regulatory context;
- 8. development of instruments and resources for training of staff for implementation of the outreach model including far reaching behavioural change;
- 9. development of remuneration systems for health and administrative staff to motivate their realisation of the outreach model;
- 10. development of integration of government and donor development efforts in the health sector.

Additionally, to sustain the model budgetary measures will be required that can be rather dramatic and require far-reaching donor support in a unified financing model of an advanced SWAp type.

The admirably designed unified model has strong support in the evidence presented in the strategic documents in the application. It is a brave concept. But through the strong

interlinks between elements in the model, it is also a model with high implementation risks. It is also a model that requires exceptional implementation skill and capacity.⁴

The activity plan is built with 19 activities under four objectives. The activities are of two different types: "**design activities**" and "**implementation activities**". Design activities build a basis for strategic mapping, concepts, frameworks, policies based on operational research and similar "up-stream" activities. The implementation activities are mostly based on these design activities and depend on them being finalised and integrated into the common "unified model" for successful activity planning and implementation.

The following design activities are represented in the plan:

- In depth health management systems analysis
- Design of a national outreach model including integration of vertical programmes
- Design of service strengthening system focusing on support systems including motivation and mobilization of health staff
- Design of framework for and implementation plan for functional integration of vertical programs
- Design and implementation of national policy to support integration
- Operational research to determine costs and savings from integration of vertical programmes
- Operational research to identify strengths and weaknesses in the integrated outreach programme

Time for the design activities is limited. In most cases the tasks need to be absolved during the first two quarters of the first year of plan implementation.

3.2 Support to Yemen in the process of drawing up the GAVI HSS Application

Yemen has benefited from initial support from GAVI and global health partners – particularly WHO – and used the possibility of getting extra funding from GAVI for a consultant to support the processes in country to draw up the application. The consultant, Ms Sharon Beatty was thought to have provided important base material for the application.⁵

⁴ One area of great importance is missing in the application and in the unified model – the involvement of the private sector.

⁵ Information from Dr. Ali A. Mudhwahi

Yemen participated in the WHO Cairo workshop that supported early stages of working with the application issues. WHO was also involved continuously during the application process through telephone conferences.

WHO, both locally and through WHO-EMRO, has been generally and specifically supportive to the process of applying for GAVI HSS funding and provided guidance and TA for critical elements of the proposal.

For the evaluation of **GAVI HSS process design**, a few fundamental questions can be asked in relation to the Yemen application.

- a. Does the design of the review process of the GAVI HSS application (handled by the GAVI IRC) meet requirements for analysing a unified model? Is a sufficiently qualified risk analysis part of this review process?
- b. Does the process of implementation monitoring and review (through the APR process and the IRC review of APR) meet the requirements of analysing a unified model?
- c. Does the unified model require the same type of approach to implementation as project style applications may call for?

4 Planning for implementation

4.1 Sustainable financing and workforce

The GAVI HSS funding for Yemen HSS adds up to 6,6 MUSD for a period of just over three years. The yearly contribution is based on an allocation per newborn of 2,5 USD. The GAVI HSS contribution corresponds to around 7% of the total budget for the public health sector according to the Third Yemen Health sector Five Year Plan. It is not quite clear to what extent the new "outreach model" is foreseen in the cost estimate for the plan.

The health provision model designed in the unified model intends to drive availability and consumption of services radically upwards. The general success of the interesting ideas will depend not only on the far-reaching and advanced system reform changes that are suggested – but also largely on the economic resources for the health sector that will be made available. The application describes a 40 % increase in funding for the health sector as probable, using undertakings of the GoY in the poverty reduction programs (PRSP) for the five year period in question. This does not correspond to the cost estimates of the 5 year plan that foresees a cost increase of 20% for this period. A considerable part of this increase must be set aside to meet increased demand caused by population increase of around 13% for this same period.

The application maintains that the program introduced in the application will serve to reduce inefficiencies and thus allow the Ministry to produce more services per cost unit. The experience from many countries is thought that this does not automatically lead to lower *total* costs – but often to higher total costs. The improved services will drive demand (which is the stated intention) to higher levels. This analysis seems to be absent in the application.

Sustainability of the plan much depends on workforce availability. Presently absenteeism is widespread in Yemen. Some health centers and health posts are closed due to a lack of staff. In many other cases "dual employment" leads to much reduced opening hours for such institutions. Part of this has to do with the low remuneration levels. Part of it is explained by emigration and insufficient resources in health staff training institutions. Cultural/gender factors are also important.

The application does reflect on the sustainability from the financial point of view. Its sustainability analysis on health workforce issues is more difficult to locate.

From the evaluation point of view this raises two important questions:

- 1. Is it reasonable to require an analysis of financial and work force sustainability in the application? How should ideally the IRC react on these issues in their review of the application?
- 2. How can a balance be struck between financial sustainability and workforce sustainability in the progress reports? What demands can be raised on analysis from the IRC in this respect? Not clear what this means?

4.2 Implementation and monitoring

The Yemen GAVI HSS proposal and its flow of financial resources is to be implemented through existing structures and use reinforced routine processes for financial management under the leadership of the MoPHP and its integrated management unit of the primary health care sector. Yemen thereby follows the indications of GAVI preferences for a well aligned implementation system. The use of the Health systems strengthening coordinating committee (HSSCC) that was set up for the GAVI HSS purposes as a body for technical oversight and co-ordination adheres to the GAVI values of harmonisation through the broad membership. The detailed effort in the application to clarify individual responsibility creates a level of accountability. At present the HSSC seems to be the forum in which donors, civil society and private sector can discuss progress with government in implementation of the GAVI HSS plan. The APR is the only named comprehensive document on which such a discussion can take place.

• The monitoring framework

The monitoring framework of the Yemen GAVI HSS plan includes six outcome/impact indicators and six output indicators. The fact that many output indicators have no baseline value will delay an efficient monitoring effort. The indicator to cover the difficult and important "design phase" of the implementation is very "soft" and the timeline (2008) for achieving the target of "full set of required policies approved and in place" seems unrealistic. Indicators the may give an understanding of "pro-poor" character of the implementation do not presently exist.

A second element of the plan for which the monitoring framework may be incomplete is the issue of demand development. There are no national indicators to cover this particularly

important part of the plan. There may be district indicators, but they are not known. It seems reasonable that the development of the HMIS system in Yemen can produce indicator values on such measures as outreach utilisation rates. The dynamic character of the plan would benefit from an equally dynamic development framework.

Similarly, the aspect of staff availability also lacks a national output indicator. Again such indicators could exist on a district level. The HMIS system may be able to produce data on this issue. It is ranked as a decisive factor in the analysis of bottlenecks for improved coverage of population health needs.

A third decisive issue from the analysis of particularly important barriers to good health provision is that of "de-verticalisation". Again, the monitoring system does not allow a followup on this aspect of plan implementation.

Cross-ministerial co-operation for GAVI HSS implementation

The special characteristic of a "unified model" with strong linkages between many areas affecting the more general and high ranking issues of governance, raises the issue of the relationship to more general governance development efforts in Yemen, particularly related to the continuing process of decentralisation. With that in view one might have expected special arrangements to be set up for co-ordination with the MoLA, the Prime Ministers Office and the Ministry of Finance. The initiative will most certainly often come from this group of ministries and it is not necessarily only an issue for the MoPHP. Absence of a "feed in process" to the MoPHP from this group of ministries could seriously disable well developed policy initiatives.

A similar implementation challenge that is not touched upon in the organisation of the application and implementation is that of contacts with the ministry of Civil Service and Procurement. Matters of remuneration and workforce motivation (activity 1.3) fall squarely within the domain of this ministry, and reform – such as could be the outcome of the broad policy making activities covered by the GAVI HSS activities – will, by necessity, have to rely on the inputs from this ministry.

The same can also possibly be said about the ministry of Higher Education and Scientific research.

Sequencing of the implementation process

The timing of the implementation process is particularly challenging. Activities from 1.1, 1.2, 1.3, 2.1 will set a general framework for most of the following activities. All these "super-activities" are complex and will demand processes for building consensus both within central government, within the MoPHP, between layers of the health sector and between vertical programs. The time set aside for them seems strikingly short and the absence in the application building process of some key ministries may create "snags" along the road that can cause delays. Such delays will immediately affect later activities – particularly those that are planned to be tried out in the 64 experimental districts.

The monitoring and evaluation system of Yemen's health sector will come under considerable pressure as a consequence of ambitions to create results-based incentives as drivers in the "outreach concept". Time sequencing will here be of particular importance. Systems that provide for individual and/or collective incentives in an organisation need to be well developed and certified for relevance and data quality before being put to general use. Changing such systems is always difficult and normally causes conflicts and frustrations. To make incentive systems results-oriented may therefore be a demanding task where experiments are necessary. The scale of 64 districts for such experiments is very demanding.

For analysis of the design of the GAVI HSS, the following question arises in relation to the implementation and monitoring process:

- 1. Is it reasonable to require an analysis of financial and work force sustainability in the application? How should ideally the IRC react on these issues in their review of the application?
- 2. How can the balance be struck between financial sustainability and workforce sustainability in the progress reports? What demands can be raised on analysis from the IRC in this respect?

4.3 GAVI (IRC) reactions on the Yemen GAVI HSS application

The Yemen GAVI HSS application resulted in a demand for clarifications from the MoPHP from the GAVI IRC. The call for clarifications is short and it is not clear what level of detail is being requested. The following subjects were touched upon:

- 1. The IRC requested an explanation on the links between the early phases of operational research⁶ and the following phases of implementation of operational research results;
- 2. the IRC requested a description of anticipated outputs and associated indicators for each phase;
- 3. further, the IRC requested a description of complementarity of other related agency activities; and
- 4. Considerations from MoPHP on sustainability of activities.

It is clear from the MoPHP's answer to the IRC and GAVI Alliance that the first question – on sequencing of operational research to implementation - is particularly complex. To an extent it is a question of terminology. The ministry seems to redefine operational research to become "assessment" or even "rapid assessment" which raises the question of what is to be assessed. The possible definition of "operational research" as a policy development activity based on strict – research based – methodologies could be understood as discarded, at least temporarily. The time set aside for operational research is now limited to 6-8 weeks for issues which other countries often struggle with over years. HSSCC is expected to adjust/approve after a consultation period of 4-6 weeks. The necessary training is to be conducted in parallel. The MoPHP also presents a list of expected outputs of the initial operational research phase.

The comments on integration of complementary development activities are answered with reference to the composition of HSSCC which includes membership of partners associated with complementary development work.

The sustainability question is predominantly answered with information about ongoing budgetary considerations within the MoF.

The clarifications presented were deemed satisfactory by the GAVI Alliance board and funding for the first phase of Yemen GAVI HSS was approved.

⁶ It seems reasonable to expect that the IRC particularly reflects on activities 1.1, 1.2, 1.3, 2.1, 2.3 and 3.6 in the application

5 Implementing GAVI HSS in Yemen

The limited format of the desk review does not allow for the same detailed analysis of the start-up and implementation phase as that of the GAVI HSS In Depth case studies. The main sources to rely on are the APR's of 2006, 2007 and 2008 and the IRC comments on them. Detailed information is only available for 2008. For this year no IRC review is, as yet, public.

A general first observation is that implementation seems to have started a very short time after the GAVI Alliance board decision. There is thus no start-up delay. No disbursement problems have been identified. Utilisation of financial resources for 2007 (implementation planned only for last quarter of 2007) is behind schedule – which is to be expected in view of the short time available for reporting on 2007. IRC comments for the 2007 APR are very reasonable and clear – according to the 2007 APR Yemen is **on track**.

The APR for 2008 is considerably more complex. Budget utilisation for the full year of 2008 is 37%; indicative of a considerable implementation (and/or financial reporting) delay. 13 activities are reported on. Out these eight were reported as either "delayed" or "rescheduled". The remaining five activities reported on had in one case (activity 1.1) no reported financial activity. Utilisation rates below 50% were reported in four of the remaining five activities. Of particular concern is the fact that activities intended to serve as "tracers" (design activities) for other implementation activities are either delayed⁷, seriously delayed or have been rescheduled. Based on this it seems that the Yemen GAVI HSS is **not fully on track in 2008**.

The APR for 2008 does not include a more general comment on the state of implementation. It is thus not possible to provide any comment as to the reason for these delays – or on the measures intended for the correction of the present situation. That, though, does not at all exclude that possibility that corrective measures have taken place.

⁷ Preparatory documents for some of the strategic "tracer" activities exist. They do not represent a full policy framework but reflect ongoing activities. Possibilities of a closer study of these activities are limited for the consultant since they only exist in Arabic.

From the GAVI HSS evaluation the following questions can be raised:

- Does the design of the GAVI HSS application process support countries sufficiently to prepare for successful implementation – even in situations when a complex "unified concept" is being used. And does the design process allow for the detection in advance of implementation problems that may potentially arise?
- 2. Is the system of monitoring GAVI HSS activity satisfactory also for "integrated complex unified concepts" such as in the case of Yemen? Would a more "country specific monitoring model" be helpful?
- 3. Could it be useful to shift emphasis in support from GAVI, WHO, UNICEF from the application process over to the implementation process?

6 Adherence to GAVI principles

It is early to judge on the adherence to GAVI principles. The guiding principles have been applied carefully by the MoPHP during the application process and the adherence to these values has been demonstrated in the application. The following comments are clearly provisional and should be revised when more is known of the implementation process:

a. Country driven

Yemen has clearly used its experiences from the GAVI ISS implementation and identified a country specific model for meeting demands from a very large underserved part of its population. The general model is clearly based on a strong, strategic analysis of the Yemen situation and can be seen as an outflow of striking progress in the use of a similar model in GAVI ISS and EPI for improving immunisation coverage. The process of applying for GAVI HSS funding included substantial support from an external consultant and, particularly, the WHO. Nevertheless, the available document indicates a clear country-driven application process.

b. Country-aligned

The question of alignment is less clear. A part of the Yemen plan deals with changing existing government management systems (such as "de-verticalisation") and developing new procedures to allow for improved transfer of central policies to lower levels of government. Yemen has avoided a PMU model for implementation which is helpful from the point of view of alignment. Availability of facts does not allow for a full analysis of how reasonable the avoidance of a PMU concept was. A critical view on alignment to country systems in Yemen has to be moderated by the fact that decentralisation is not fully operational in Yemen; thus creating a particularly challenging environment for aligned solutions in the health sector.

c. Harmonized

The initial analysis of the situation pre-GAVI HSS showed harmonization as a weak element of Yemen health development. Clear efforts are demonstrated to get development partners on board and to include lower levels of government in the policy making processes. As in many countries WHO and UNICEF have been given a special position in the community of external partners. WHO seems to serve as a more general policy advisor – often in a TA function while UNICEF focuses on its role as a procurement agency. Other donors – mainly World Bank, EC, USAID, JICA - have a more limited role but are still considerably more active than pre-GAVI HSS in the joint undertaking of Yemeni health development. A possible conclusion is that Yemen with the GAVI HSS has laid a foundation for a development towards a more integrated set of institutions and processes between government, donors and CSO's.

d. Predictable

The complex set up for the Yemen GAVI HSS plan makes disbursement of funding less predictable, and even desirable. Low utilization rates could endanger disbursement both from GAVI and from the MoPHP. The analysis of the application and the complex organisation of implementation processes could have made a country specific flexible funding plan possible from which Yemen would have benefited.

e. Additional

Nothing indicates a problem of additionality in Yemen. The analysis of cost sharing arrangements does not indicate that GAVI HSS resources could reduce its role. Data on GoY budget plans indicate continued growth of the health budget. There are no signs – although the data are not readily available – of donors reducing their support because of GAVI funding.

f. Inclusive and collaborative

Based on the application only, a judgement on inclusiveness is weighted negatively by the lack of involvement from the private sector. The private sector is not part of the plan in any respect and there are no indicators in the monitoring framework that address private sector matters. The analysis could be made better if the role and quality of the private sector played outside the main population centers had been known. A private sector survey is mentioned on the MoPHP website, but no data is presently available as to its general direction or results.

There is a strong gender element both in the strategic thinking in Yemen and in the GAVI's HSS plan. The gender element also returns in the monitoring framework of the plan. Clear efforts are demonstrated in the application process to deeply involve the governorates/districts/facilities.

g. Catalytic

A judgement of catalytic elements of the Yemen proposal is made difficult by the fact that the proposal is so wide and comprehensive. Influence on institutions and processes outside the "unified model" are difficult to envisage since they do cover such a great number of system

elements. If a process of interaction with the private sector emerges during the implementation phase, a truly catalytic effect could potentially be realised.

h. Innovative

The outreach model for covering the needs of the rural population is quite innovative, although it was still vague at the time of the application. It is clearly innovative even if it is in line with ideas for devolved PHC in other countries

I. Results-oriented

The Yemeni model is clearly results-oriented. Incentive structures are being considered in several different aspects of the plan. Implementation may be very challenging though and the outcome of the realisation process of the proposals in these respects should be awaited before clearer judgement can be made.

g. Sustainability-conscious

The analysis of financial sustainability is not totally convincing. The financial consequences of introducing the long chain of reforms that will enhance demand for health services are not clear. The introduction of per-capita cost indicators in the monitoring framework will give some information that can support the analysis of financial sustainability. The absence of national indicators measuring the level of demand makes sustainability analysis very difficult. There is very little analysis of work-force sustainability although the introduction of an incentive structure clearly aims at improving the present difficult situation. No monitoring indicators exist to follow the foreseen improvement in staffing of facilities.

h. Poverty focus

The Yemeni strategic planning as well as the application to GAVI for HSS funding has a clear poverty focus. This can also be said about the selection of 64 districts for implementation of the plan. In spite of this, the monitoring system does not specifically address the poverty issues (except through the selection of intervention districts). The Yemen Family Health Survey⁸ could in principle provide data on poverty associated with the health status and health service consumption by using educational data as a proxy for poverty measurements. However no poverty element has been included in the monitoring framework.

⁸ Yemen Family Health Survey. From the web July 28 2009

Annex 1 Basic documents used for the desk study

GAVI document database:

GAVI Alliance Health System Strengthening (HSS) Applications: Revised guidelines GAVI Alliance Health System Strengthening (HSS) Application, Yemen, May 2007 Communication to Minister MoPHP. Yemen from GAVI Alliance of August 8 2007 Communication to Minister MoPHP, Yemen from GAVI Alliance of June 15 2007 Communication to Minister MoPHP, Yemen from GAVI Alliance of December 14 2007 Communication to Minister MoPHP, Yemen from GAVI Alliance of September 2008 Annual Progress Report 2006 from MoPHP, Yemen to GAVI Alliance Annual Progress Report 2007 from MoPHP, Yemen to GAVI Alliance Communication to GAVI alliance from MoPHP. Yemen to GAVI Alliance (no date)

Various minutes from MoPHP HSSCC meetings

Strategic documents from MoPHP and various Yemenite health development partners

Health Sector Reform in the Republic of Yemen: Strategy for Reform, Ministry of Public Health Sana'a October 2000

The Third Five year plan for health development and poverty reduction 2006-2010. MoPHP Yemen (No date)

Yemen Family Health Survey 2005. From the Web 28 July 2009

Yemen – EPI Assessment Study 2006, Yemen Ministry of Public Health and Population 2006 Public Expenditure Review, Health Sector Republic of Yemen, 1999-2003 World Bank

Health Sector Development in Yemen, Making Choices: Towards a Strategic Planning for the DPRP, Koninklijk Instituut voor de Tropen, Amsterdam 2004

Decentralisation and Local Development Support Programme (DLDSP): from web UNDP.ORG July 28 2009-07-28

Capacity assessment and baseline indicators in 64 Yemeni rural districts to deliver PHC through an integrated system, Yahia Ahmed Raja'a, January 2007

Functional Integration of Vertical Programs & National integrated outreach model, summary report MoPHP May 2008

Annex 2 List of people interviewed

Various personal communications with Dr. Ali A. Mudhwahi, MoPHP Yemen July 2009

Annex 3 Summary GAVI HSS Evaluation Approach

The GAVI Alliance HSS Evaluation Study Approach

On February 2009 HLSP Ltd won the contract for the 2009 GAVI Health Systems Strengthening (HSS) support Evaluation. The expectation for this evaluation is to determine to what extent operations at country level and support from global and regional levels, as well as trends in health systems and immunization are heading in the right (positive) direction. Qualitative and quantitative information will be collected and analyzed both retrospectively as well as prospectively beginning from the time that the application process commenced in country throughout implementation and monitoring and evaluation of the project to date.

There are five main objectives and areas of evaluation:

- 1. What has been the experience at country level with GAVI HSS in terms of *each* of the following: design, implementation, monitoring, integration (harmonization and alignment), management, and outputs/outcomes?
- 2. What have been the main strengths of GAVI HSS at the country level, and what are specific areas that require further improvement?
- 3. How has GAVI HSS been supported at regional and global levels—what are the strengths of these processes and which areas require further improvement?
- 4. What has been the value-added of funding HSS through GAVI as compared to other ways of funding HSS?
- 5. What needs to be done, and by when, at country, regional, and global levels to prepare for a more in-depth evaluation of impact of GAVI HSS in 2012?

The GAVI HSS evaluation will develop **five In-depth country case studies**. These are structured in such as way that independent consultants teamed with local consultants spend time in countries documenting country experiences. We anticipate up to two visits to each in-depth country between the period of May and June 2009. The first visit will focus largely on interviewing key country stakeholders to map key areas of interest, information and gather initial data. This visit may also include engaging / commissioning a local research institution to conduct further research into particular districts/ activities. During the second visit we anticipate any outstanding stakeholders. We will explore with national stakeholders the opportunity and convenience of conducting an end-of-mission 'validation workshop' in order to provide countries with feedback on the in-depth case studies, and seek validation of these.

In addition, the results from the in-depth case studies will be **complemented by the results of 6 ongoing GAVI HSS Tracking Studies** being conducted by the JSI-InDevelop-IPM research group that will become fully fledged GAVI HSS Evaluation studies. Finally, the HSS Evaluation team will desk review all HSS application forms, HSS proposals and HSS Annual Progress Reports produced to date in order to **develop a database of HSS countries**. All these sources of information put together will aim to answer the five study questions mentioned above.

Annex 4 Typology of areas for HSS support

Key stages in the HSS 'funding cycle'.	Support available	Responsible for support
Information about HSS funding	Policies; broad 'rules of the game'	GAVI Secretariat
and processes	Guidelines for applications	GAVI Secretariat, HSS Task Team
	Communication with countries re funding rounds, proposal guidance, dates and deadlines	GAVI Secretariat
Proposal development	Financial support for TA (\$50k max) TA	TA provided by UNICEF, WHO, other national or international providers
Pre –application review	TA to check compliance, internal consistency etc.	WHO
Pre application peer review	Regional support, inter-country exchanges, tutorials, learning from experience, etc.	WHO HSS Focal Points
Submission of proposal and formal IRC review	Internal process	IRC-HSS
IRC recommendations	Internal process	IRC-HSS
Decision on proposals	Internal process	GAVI Board; IFFIm Board
Countries informed	Information to countries on decision, conditions, amendments, etc; and steps to obtain first tranche funding	GAVI Secretariat
Funding	Finances transferred to country	GAVI Washington office
Implementation	TA (if budgeted)	UNICEF, WHO, other national or international providers
M & E	TA (if budgeted)	Defined in proposal, e.g. National Committee.
APR pre review	Validation of APR	HSCC / ICC
APR consideration	Feedback to countries	IRC-Monitoring

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