District-level Decision Space Analysis in Pakistan

Relationships between decision space, capacities and accountability in five health functions with selected district performance measures

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District-level Decision Space Analysis in Pakistan:

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TABLE OF CONTENT

LIST OF TABLES

ACRONYMS

ANC	Antenatal Care
BPS	Basic Pay Scales
CCB	Community Citizen Board
DCO	District Coordination Officer
DHD	District Health Department
DOH	District Officer for Health
DSA	Decision Space Analysis
EDO	Executive District Officer
EDOFP	Executive District Officer (Finance and Planning)
EDOH	Executive District Officer (Health)
EmONC	Emergency Obstetric and Neonatal Care
FM	Financial Management
G&LP	Governance and Local Participation
HMIS	Health Management Information System
HR	Human Resources
HSPH	Harvard School of Public Health
LHV	Lady Health Visitors
MOH	Ministry of Health
MS-DHQ	Medical Superintendent for District Headquarters Hospital
MS-THQ	Medical Superintendent Tehsil Headquarters Hospital
NFC	National Finance Commission
NWFP	North-West Frontier Province
PFC	Provincial Finance Commission
RHC	Rural Health Center
SBA	Skilled Birth Attendant
SO	Service Organization
S&OP	Strategic and Operational Planning
WHO	World Health Organization
WMO	Woman Medical Officer

EXECUTIVE SUMMARY

In Pakistan, decentralization to the district level has been in the process of implementation since 2001. District-level officials have become increasingly responsible for the effective implementation of local health services and the USAID-sponsored PAIMAN project has been charged with improving the district-level capacities in order to improve the implementation of specific interventions to improve maternal and neonatal health in 10 selected districts.

To assist this process, the Harvard School of Public Health (HSPH) and its partner Contech and key officials of PAIMAN, implemented a survey of 126 key officials in 17 districts and one agency. The PAIMAN project in Pakistan is working in ten of these districts, the development agency GTZ is working in two, and five districts/one agency were selected to serve as comparison districts. This survey is a baseline survey based on similar assessments that have been implemented by HSPH in other countries. It is designed to assess three key dimensions of decentralization:

- the degree of decentralization decision making (which we call "**decision space**") for key officials in each district over five key health system functions (financial management, human resources management, strategic and operational planning, service organization, and governance and local participation);
- the **capacities** to make decisions and implement them in each of the five functions; and
- the **accountability** of officials to local authorities.

It was also designed to relate the degree of decentralization to measures of performance in human resource management, budgeting, and service delivery.

It was expected that findings from this study would inform the capacity-building training and system strengthening components of the PAIMAN project as well as provide an evidence base for advocacy materials to improve decentralization policy in areas needed for improving PAIMAN services.

The study's findings and conclusions, based on univariate and correlational analyses of the survey and performance data, are summarized below:

- **Levels of decision space, capacity and accountability:** As expected, we found **significant variations among the 10 districts and among different categories of officials along all dimensions of decentralization — decision space, capacity and accountability**. While a district-by-district analysis of the precise relationships could be of use to officials in those districts, this study's findings suggests that there may be a general need to:
  1) **Develop capacity programs tailored to the different needs of each district — increasing capacities especially in those districts with low reported capacities.** For instance, the findings indicate that Jafferabad could benefit more from capacity-building

focused specifically on service organization and governance and local participation, whereas Lasbella could benefit from across-the-board capacity-building.

2) **Apprise districts reporting low decision space of the possibilities of making more independent choices.** This would be applicable to the human resources and planning functions for Khanewal, or for the human resources and service organization functions for Upper Dir.
3) **Apprise districts reporting low accountability of how to be more responsive to priorities of local officials**.

- **Congruence among decentralization dimensions:** There appears to be some degree of consistency of levels of the dimensions of decentralization within a particular function, but the **correspondence/consistency among dimensions varies from function to function**. This finding reinforces the view that analyzing decentralization in a function-specific way can provide insights not apparent if one assumes decentralization is applied evenly across health functions. There may therefore be a need to:
  1) **Improve capacity or limit decision space for functions in which decision space is higher than capacity.** The findings of this study suggest that this is the case only for the strategic and operational planning function.
  2) **Use policy advocacy programs to increase decision space for functions in which capacity is higher than decision space,** based on evidence that existing capacity could lead to appropriate decisions and implementation. This applies to the financial management, human resources and service organization functions.
  3) **Target joint decision space/capacity building efforts initially at districts with the low levels of both.** Dadu, Buner, Lasbella and Jafferabad, for instance, appear to have the least congruence both within- and between-function.

- **Decentralization and human resources performance**: We found that those districts that had **higher levels of decision space, capacity and accountability were least likely to have performed well on some dimensions of human resources staffing** (e.g., percentage of all posts filled).

- **Decentralization and budget performance**: There is mixed evidence of relationships between decision space, capacity and accountability and budgetary outcomes. On the one hand, **when higher level officials have higher levels of decentralization dimensions they tend to devote less of the district budgets to health**. However, **when the lower level officials who are responsible for the management of the health sector have higher levels of decentralization dimensions they have higher levels of expenditure within their allotted budgets**.

- **Decentralization and health service delivery**: Three of the health services indicators exhibited the most consistent (and positive) correlations among all the outcomes with the dimensions of decentralization. **The percentage of skilled birth attendant-assisted births and two antenatal care indicators were almost universally positively associated with a variety of decision space, capacity, and accountability indicators (including several of the congruence indicators).** One hypothesis offered was that since service delivery is the most visible aspect of the working of the health system, decentralization in decision space,

coupled with capacity and accountability, may be associated with responsiveness to better delivery of services.

The findings for the correlation analysis between the decentralization dimensions and the performance indicators should be treated with caution since the low number of districts limits the confidence we would have in the statistical analysis and further study should be done to confirm these initial exploratory findings. Nevertheless, we feel confident that the survey results can be used for developing specific capacity building and advocacy programs for each of the districts in the PAIMAN project (see Annex II: District-by-District Analysis).

1. BACKGROUND

On August 14, 2001, the Government of Pakistan embarked on decentralization-oriented reforms with the introduction of a management and organization plan to establish local governments in all districts of the country. The proposed plan was based on devolution of political power, decentralization of administrative authority, deconcentration of management functions, diffusion of the power authority nexus and distribution of resources to the district level. Under the plan, districts are treated as basic administrative units responsible for some choices in the functions of planning, financing, management and services organization. The devolved system was intended to provide the choices to the districts for utilization of allocated budgets according to their needs and to exercise the managerial authority over human resources to improve the efficiency of the services and to encourage more community participation.

Since that time, Pakistan's devolution of authority has now entered a critical phase. Districts are struggling to make choices required of them as well as develop capacities to improve the efficiency and effectiveness of various health services. The system as a whole must find an appropriate balance that allows an effective range of choice to local officials while also ensuring that these choices are conducive to achieving district, provincial and national-level objectives. In the health sector, devolution of authority and responsibility to the districts has offered a renewed opportunity as well as a challenge for strengthening district health system for the delivery of quality health services that are accessible, efficient and equitable.

In studying decentralization there are at least six key issues that need to be defined clearly. First, decentralization is complex and therefore it is important to define the decision making authority that is granted to districts–something we will call "decision space" after the framework of the first author of this report (Bossert 1998). Second, decentralization involves granting decision space with different ranges for different functions. In other words, local officials may have a wider range of choice over service delivery choices than over financing or other functions. So it is important to analyze choice over these different functions in detail. Third, what is formally allowed in law may not be the range of choice that is actually practiced by local officials–some may make fewer choices than they are allowed while others may take more choice. So it is important to ask local officials about the choices that they actually make and not the choices that they are formally allowed by reviewing the laws and regulations. Fourth, some choices require a basic level of administrative capacity–in numbers of appropriate personnel, training, guidelines, etc. -- in order to make appropriate choices. It is therefore necessary to assess the capacities that local officials have for the different functions that they make choices about. Fifth, the role of local accountability may vary considerably and its influence on decision making may be positive or negative. And finally, the differences in decision space, capacities and accountability may have an impact on the effective performance of the districts in the key functions that have been decentralized.

The objective of this study is to analyze health sector decentralization by assessing the existing decision power that lies with the various district health authorities over finances, human resources, services organization and district planning and management. Our central questions are:

1. What is the range of actual exercised decision making authority ("decision space") over different health system functions, the range of capacities in those functions and the amount of accountability to local authorities among the different districts in Pakistan?
2. Do those districts which exercise more decision space in key functions have the appropriate capacities to make good decisions? In other words, does decision space and capacities match?
3. Are those districts which have more decision making authority and those with congruence between decision making authority and capacities able to perform better in those key functions?
4. Do districts which have more accountability to local authorities also have better performance in the key functions?

To achieve this objective, the study had three specific aims. These are: 1) defining the range of choice local authorities are able to exercise over five health functions (strategic and operational planning, financial management, human resources, service organization, governance and local participation); 2) assessing current and near-term capacities of institutions taking over this range of choice; and 3) assessing the role of local participation and accountability in decision-making. This study also assesses the relationship between the combination of decision space, capacity and accountability and several indicators of health system performance, including management of budgets and human resources and service delivery activities.

These general objectives are complemented by objectives of improving the system capacities to support the objectives of the PAIMAN project. The effectiveness of PAIMAN project activities depends in part on the ability of district officials to make appropriate decisions and have the capacities to make and carry out those decisions. It may also depend on what ways local health officials are accountable to local district political authorities. Specifically, this study is designed to assess the capacity needs at the district level that the project can provide–especially in management training and systems strengthening–and in advocacy for policy changes in decentralization – especially for changing the range of decisions local authorities are authorized to make and changing the accountability mechanisms for more effective local involvement. Furthermore, the study can provide a baseline for evaluation of the effectiveness of PAIMAN interventions in these areas.

Several key issues are addressed in this analysis. First, we will define the differences in the exercise of local choice reported by different districts. Second we will assess the congruence between the range of choice and the administrative capacity to exercise that choice. Third, we will assess the relationship between choice and local accountability. We expect that it is important for decentralization to have both local capacity and local accountability consistent with the range of choice that local officials are able to exercise. If we find that there is more capacity than range of choice then that suggests a policy recommendation to increase the decision space for districts. If there is less capacity, we would expect that interventions to increase capacity would be needed to assure that decisions made by local officials are appropriate and implementable. If we find that there is low local accountability in relation to decision space a policy recommendation could be that mechanisms to increase local

accountability be implemented. We will say more about this in the section on conclusions and recommendations.

The statistical analysis was designed to identify those districts which had higher decision space than the average and those that had more congruence among indicators of decision space and capacities. This analysis allows us to identify those districts with more flexibility in making their own decisions and those whose administrative capacities are consistent with their wider decision space. We will then be able to see if those districts with more ability to make decisions and those whose capacities are reasonably matched with the decisions they make are indeed those with better performance measures. Similarly, are those districts with more accountability to local authorities also those with better performance?

We first present an overview of decentralization in Pakistan to explain the roles and responsibilities of the key actors at the district level, the civil service rules and the forms of accountability. Then we review the survey data and methodology used for analysis. We then present the results of the univariate and correlational analysis, followed by a discussion of the findings and the limitations of the study. We conclude with suggestions for interventions to upgrade the capacities, adjust the decision space for district officials and improve appropriate measures of local accountability.

2. DECENTRALIZATION IN PAKISTAN

2.1.Decision Space approach to decentralization

Understanding decentralization involves addressing two basic questions: "who gets new powers of decision-making" and "how much power over what functions"? In any country undergoing decentralization, new laws, regulations, and governmental decisions are generally drafted to redefine lines of authority and hierarchical relationships. Beyond these officially inscribed documents, however, powers over decision-making are often informally changed as well. Lack of enforcement of formal relationships, for example, may allow lower-level officials to "bend the rules". Addressing decentralization's two basic questions therefore involves analyzing both the formal and informal components to decentralization.

This study's approach to analyzing decentralization in Pakistan is based on the "decision space" framework developed by Dr. Bossert of the Harvard School of Public Health (HSPH). The World Health Organization (WHO) views decentralization along a continuum, using the terms deconcentration, devolution, delegation and privatization. "*Deconcentration"* is an increase responsibility and authority of regional and district offices within a Ministry of Health (MOH) and often represents the least degree of decentralization. "*Devolution*" shifts responsibility and authority beyond the MOH to provincial or municipal governments, which introduces new actors at this level who may have more independent choice and different priorities. "*Delegation*" is a shift of responsibility and authority to semi-autonomous governments, such as a Central Board of Health or Joint Commission on Accreditation. "*Privatization"* represents a change in ownership of health services provision from government sector to the private sector and

breaks the direct governmental controls that are exercised in the other types of decentralization.

While the WHO's administratively-oriented categorizations are of some help in distinguishing between decentralization's formal side, they cannot capture the degree of informal decentralization. To address this gap, this study uses the concept of *"decision space"*, that is, the range of effective choice that is allowed by the central authorities to be exercised by local authorities. Decision space can be both officially granted and informally assumed, both of which define the specific "rules of the game" faced by decentralized units. Decision space may be negotiated and cause friction between levels, with local authorities challenging the degree of decision space conferred on them by the central authorities. It can be mapped for various function or expressed in ranks as "narrow", "moderate" and "wide". Moreover, different degrees of decision space may exist depending on the various functions and activities over which local authorities will have increased choice. For example, a greater or lesser degree of decision space along one dimension (e.g., human resources) may not imply commensurate decision space along other dimensions (e.g., budgeting). Using the decision space approach allows us to disaggregate the functions over which local officials have a defined range of discretion, rather than seeing decentralization as a single transfer of a block of authority and responsibility. [1]

2.2.Local government under decentralization – general structure

Pakistan is a federation that is administratively divided into four provinces (Balochistan, North-West Frontier Province (NWFP), Punjab, Sindh, a capital territory, federally-administered tribal areas, and the Pakistan-administered areas of Kashmir and Northern area.[2] The provinces and the capital territory are subdivided into districts, which are then further subdivided into "tehsils" and within each tehsil the smallest unit is "union". This study focuses on the district level as districts are the basic administrative units responsible for implementing most of the policies in the health sector.

Within each of Pakistan's provinces, districts are the highest unit of local governmental administration. While the number of districts within a province varies (e.g., Punjab Province has the largest number of districts (35) followed by Balochistan (28), NWFP (24), and Sindh (23)), all district governments are headed by a "Zila Nazim", an elected official accountable to the Zila Council.

Local government elections are held on non-party basis. Members of a Union Council including Union Nazim and Naib Union Nazim (deputy) are the only officials elected by direct popular vote. The other levels, including the Zila/Tehsil/Taluka/Town Nazim are elected indirectly through an electoral college made up of officials from the next lower level. For instance, the Zila (district) and Tehsil Nazim are elected by an electoral college made up of the directly elected Union Nazim in that Tehsil. In addition the Council members are subject to reserved seats for women, peasants and workers and minorities.

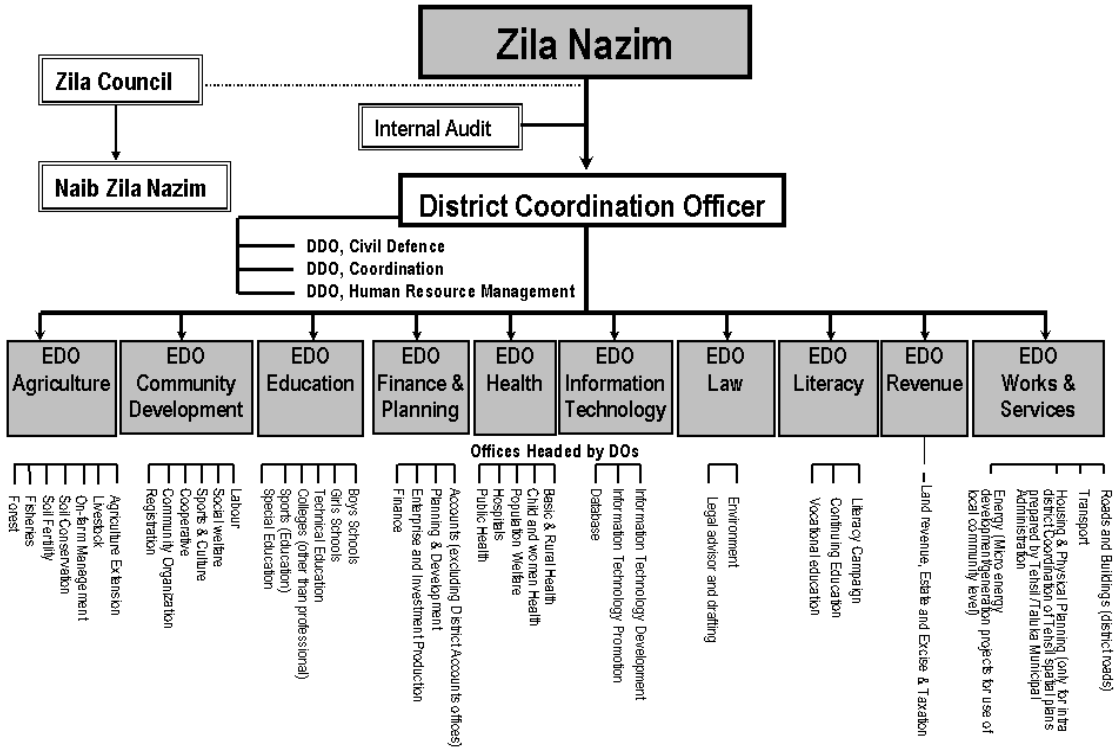
[1] Bossert T. Analyzing the decentralization of health systems in the developing countries decision space, innovation and performance. Soc. Sci. Med. Vol. 47, No. 10, pp. 1513±1527, 1998

[2] Pakistan Constitutional, article 246(b) on the Provincially Administered Tribal Areas.

Nazim and Naib run for office on a joint ticket and, upon being elected, become members of the Union Council. The Union Naib Nazims also become members of the Tehsil Council, while the Union Nazims become members of the Zila (district) Council. The Tehsil Council and the Zila Council elect Tehsil Nazims and Zila Nazims respectively. The Nazims at these two levels of local government are not members of the Councils, but rather representatives of the larger community. Terms of office are four years all beginning in August after the elections of that year.

The Zila Nazim is assisted by a District Coordination Officer (DCO). The DCO, appointed by the provincial government from the federal or provincial civil service, is the head of twelve district-level offices (one of which is related to health) and is accountable to his or her Zila Nazim. The DCO, in turn, coordinates with Executive District Officers (EDOs). EDOs, also appointed by the provincial government, head each of the twelve district offices (see *Figure 1*).

Figure 1. Offices working under District Coordination Officer in District Government



*(**Source:** Ritu Nayyar-Stone, Robert D. Ebel, Sonia Ignatova, Khalid Rashid, Harry P, Hatry, H, Peterson. Assessment Report: Pakistan Development Support Project. USAID; February 2006)*

Salary packages of the government civil servants employed by federal, provincial or district governments are determined by the Basic Pay Scales (BPS). The pay scale (which runs from 1 (minimum) to 22 (maximum) are set federally and adopted by the provincial governments. Functional authority usually is commensurate with BPS rank, though

officers are sometimes promoted to a higher BPS level for salary purpose without commensurate increase in job grade.

2.3.Local government under decentralization–Health

At the provincial level, the Health Department is headed by the Minister of Health (elected representative), who operates through the office of the Secretary-Health (civil servant). The provincial department of health is responsible for policy-making and regulation. Prior to devolution, service provision, including delivery of services and posting of staff at the district and sub-district levels, was the responsibility of the provincial governments. After devolution, health service delivery has been almost entirely devolved to district governments, with the exception of operating the large teaching hospitals (with attached medical or dental colleges) which has remained under the direct control of the provincial government.

The district health department is headed by the EDO for Health (EDOH) and organized similarly across provinces. The EDOH is assisted by a number of officials to effectively manage the district health department, including: the district officer health (DOH) (except in NWFP), who is responsible mainly for primary health care. Secondary-level hospitals (THQ and DHQ) are managed by Medical Superintendents (MS-THQ and MS-DHQ, respectively) who directly report to EDOH.

2.4.Decision Space for Various Functions in Health Department

The range of *formal* powers that various district stakeholder are *officially allowed* to exercise over various functions as defined under the devolution are described in the forthcoming paragraphs. In our survey we will be assessing the congruence between the *formal* powers and the *actually exercised* powers for each of the five functional areas.

2.4.1. Decision Space in Human Resource Management

With regards to the DCO and EDOs, human resource management is standardized across provinces. If the performance of DCO is not satisfactory, the Zila Nazim may request the Government for his transfer in writing, with a copy to the DCO, stating reasons therefore; and the Government usually accedes to the request of the Zila Nazim. Where the performance of an EDO is not satisfactory, the Zila Nazim may, in consultation with the DCO, request the Government to transfer the officer from the district stating reasons therefore. The DCO initiates the performance evaluation reports of the EDOs and is the countersigning officer of such reports of the District Officers initiated by the EDOs.

At lower levels, authority in hiring, transfer, substitution, disciplinary actions, promotion, contracting and firing for each category of district officials vary from province to province. At present, control over medical staff (doctors and nurses) is exercised both by provincial and district governments. All the staff of district health department report to the EDOH, but the powers of postings and transfers are distributed among the administrative staff of the district according to BPS. The DCO can transfer/substitute the medical staff within the district, except for administrative

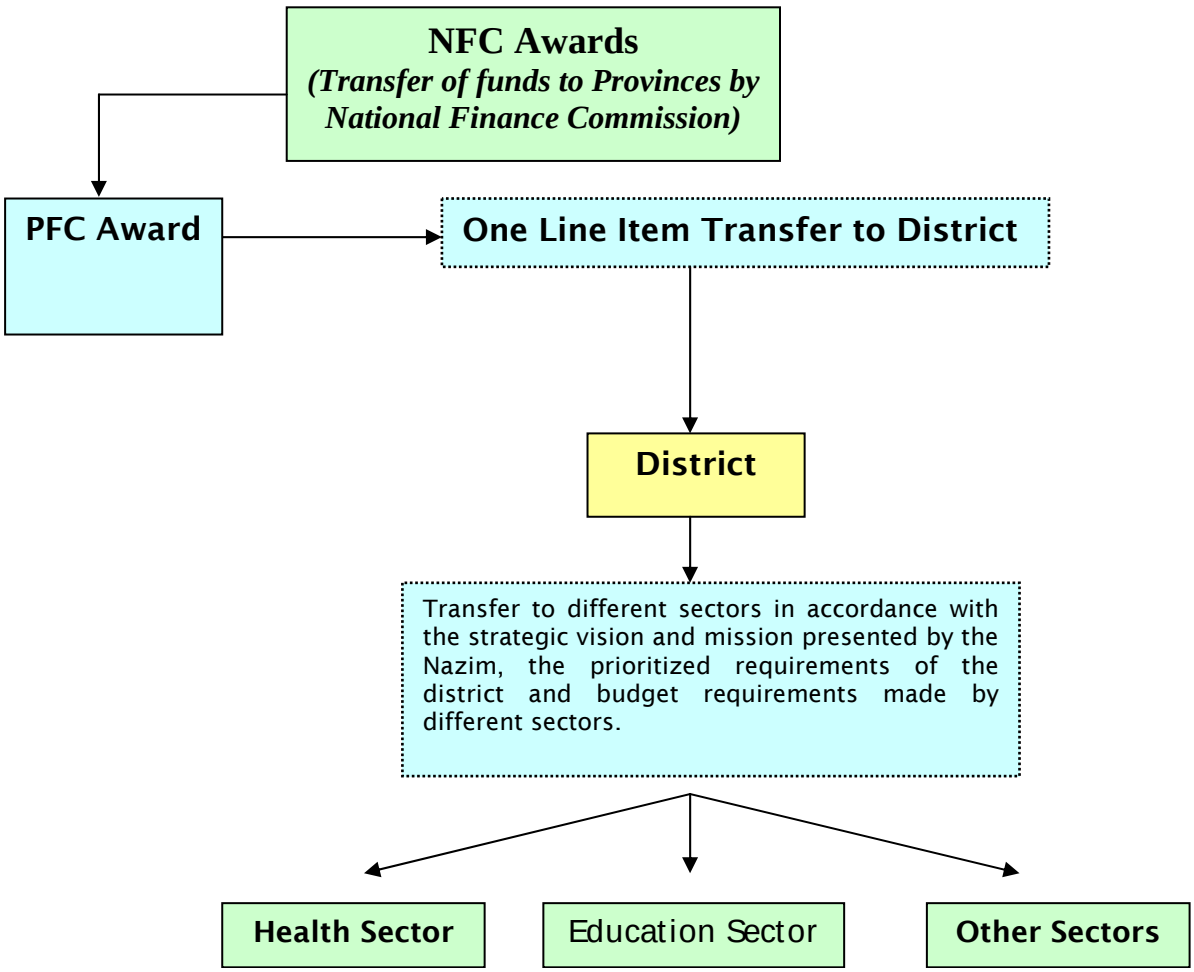
positions which are controlled by the provincial government. For inter-district transfer, he can propose/recommend to the provincial health department.

As an example of differences by province, those below the DCO in Punjab (e.g., EDOH, DOH) exercise hiring, firing and transfer powers for human resources (EDOH can higher transfer/substitute the officers of grade 10 and below while DOH has this authority up to grade 4 and below). In other provinces, however, no power for human resources is delegated below the EDOH.

2.4.2. Decision Space in Financial Management

The annual budget for each local government contains estimates of: (a) grants-in-aid from the Government; (b) amounts available in the respective Fund; (c) receipts for the next year; and (d) expenditures to be incurred for the next year. To enable the budget preparation by Local Government, the Government notifies the provisional shares, sufficiently before the beginning of each financial year, which may be credited to the Fund of respective Local Governments from the provincial allocable amount. In addition to PFC awards some conditional / earmarked grants are also given to the districts.

Figure 2. Financial Flow System



*(**Source:** Financial Flow System for the of Local Government in Pakistan)*

The budget of a local government can be presented to its respective council and the budget is approved by simple majority of the total membership of the respective Council. A revised budget for the year is prepared by a local government for approval by its Council. DCO acts as Principal Accounting Officer of the District Government and be held responsible to the Public Accounts Committee of the Provincial Assemblies. [3],[4]

The authority of expenditure of EDOH and other health officials varies from province to province. Each province notifies the delegation of financial powers against the sanctioned budgets for each category or heads. The government officials are categorized for exercising the financial power as per hierarchal level in the government. The provincial Secretaries and DCOs are the administrative heads of the departments and in most of the cases they are authorized to utilize the full amount sanctioned against a particular item. The officials below the Secretaries/DCOs are categorized as I, II, III, and IV as per descending order of authority for budget utilization. For instance, power for expenditure on repair of instruments according to the category of the officer, as mentioned in the Punjab Delegation of Financial Powers, Rules 2006" is given below:[5]

(i)	Administrative Department.	Full Powers
(ii)	Officers in Category-I	Up to Rs.100,000/- in each case
(iii)	Officers in Category-II	Up to Rs.20,000/- in each case
(iv)	Officers in Category-III	Up to Rs.15,000/- in each case
(v)	Officers in Category-IV	Up to Rs.10,000/- in each case

The exercise of financial power varies by province. For example, the EDOH in Punjab is a category-I (high authority) officer while in other provinces the EDOH is category-II (medium authority). The DCOs of the districts in all provinces have full authority of expenditure and are the principle accounting officer of the district.[6]

2.4.3. Decision Space in Strategic and Operational Planning

In Pakistan's devolved set-up, the Zila Nazim provides the vision for district-wide development, leadership and direction. He oversees the formulation of annual development plan for delivery of services and functioning of district government, and develops (with assistance from the District Administration) strategies and a timeframe for accomplishing goals approved by the Zila Council.

The DCO is the coordinating head of the District Administration and responsible for coordinating activities of the twelve district offices to ensure coherency in planning, synergistic development, and effective/efficient functioning of the District Administration. The DCO is responsible for preparation of the strategic (multiyear) and operational (annual) plans for the districts, with the assistance of EDO for

[3] Government of Pakistan. The Punjab Local Government Ordinance; 2001 updated 2002 (ORDIINANCE No..XIIIIII)
[4] The North-West Frontier Province, Local Government Ordinance, 2001; (N.W.F.P. Ordinance No. XIV /2001)
[5] Govt. of the Punjab, Finance Department. The Punjab Delegation of Financial Powers, Rules 2006.
[6] It is worth mentioning that the categories are specific to posts not to grades. For example, any officer posted as category-I will exercise the category-I powers irrespective of his/her grade.

Finance and Planning (EDOFP) and EDOs of respective departments and under the policy guidance of provincial government (e.g., the EDOH in the case of the health sector). The DCO prepares a report on the implementation of development plans of the District Government for presentation to the Zila Council in its annual budget session. EDOs also have to prepare annual development plans in consultation with their sub-offices. For instance, the EDOH prepares an annual development plan for health in consultation with the DOH, MSDHQ and MSTHQ, and projects health priorities for strategic planning of the district. The power of approval of development scheme exceeding Rs 1000 millions are with federal government and the development schemes costing more than Rs 2 million up to 1000 million are approved by the provincial governments while the districts can approve new development scheme Rs 2.0 million.[7]

2.4.4. Decision Space in Service Organization

Service organization authority regarding pharmaceutical procurement, local purchases, repair and maintenance of equipment/transport, and the like is governed by the expenditure power of the officials delegated to them. Since categories assigned to district officials vary from province to province, so do practices of purchase and procurement. For example, contracts for procurement of medicine and supplies in NWFP are determined at the provincial level. While Punjab previously followed this practice, now Punjab DCOs purchase drugs and other items through district procurement committees. EDO, DOH and MS DHQ and THQ hospitals can make procurements according to their delegated financial powers. Departmental purchases are usually made through the purchase committees which are responsible for checking the specifications of the procured items. Similarly the power of revoking contracts is also exercised by committee.

Regarding the human resource element of service organization, officials can reallocate staff temporarily according to their substitution/transfer powers within the department. Such reallocated staff draw salaries from the original station of posting but perform duty on the temporarily allotted station. Again, these practices vary from province to province.

Community participation in service organization at the district level is practiced through Community Citizen Boards (CCBs). If a CCB contributes 20% for certain proposed project, the district government contributes 80% of the total cost of the project. Projects like safe water supply, waste disposal, school health services etc. can be managed through CCB projects.

Health Management Information System (HMIS) in service organization has been introduced at First Level Care Facility (i.e., Basic Health Units and Rural Health Centers (RHC)). The information generated from these facilities is consolidated at the district level and submitted to provincial and federal levels. However, the utility of

[7] Govt. of the Punjab, Finance Department. The Punjab Delegation of Financial Powers, Rules 2006.

this information for needs assessment and planning is not well organized due to number of reasons.[8]

2.4.5. Capacity

Capacity is the ability of each category of health official to exercise prescribed authorities over each management function. For instance, all DCOs are empowered to develop strategic and operational plans for the districts. A lack of trained staff or deficits in personal knowledge and skills that prevents them from carrying out that function implies insufficient capacity in strategic and operational planning. Thus whereas decision space marks the boundaries of choices and responsibilities over various functions, capacity enables officials to fully exercise their powers. Moreover, just as wide decision space in one function does not imply wide decision space across other functions, so capacities may vary by management function. In short, the effective decision space over the performance of the districts cannot be appreciated without capacity evaluation.

2.4.6. Accountability

There is duel system of political accountability of the district governments; i) External ii) Internal. Externally, the Chief Minister may take certain actions against a Zila Nazim in conjunction with the provincial government. Internally, a Zila Nazim faces accountability from the district assembly/Zila Council Additionally, the "Zila Mohtasib" is a district-level institution composed of functionaries and which redresses citizens' complaints against maladministration of the holders of public offices in the local governments.

Fiscal accountability is based on external and internal financial audit. For external audit, the Auditor-General of Pakistan may consider appropriate or necessary to certify the accounts, prepared by the District Accounts Officer for each financial year in the prescribed manner, submit the certified accounts with such notes, comments or recommendations, as he may consider necessary, to the competent authority for placement before the Public Accounts Committee of the Province. Internally, the Nazim of each District Government can appoint an Internal Auditor to provide information to him and members of the respective Council on local government performance.

3. DATA

The sample is divided into three groups: PAIMAN intervention districts, GTZ intervention districts, and non-intervention (control) districts/agency. The ten PAIMAN districts of this study exhibit diverse demographic and socio-economic characteristics. Rawalpindi and Jhelum (Punjab province) have high population densities (particularly urban density), high literacy rates, relatively well-developed health care delivery infrastructure and communication networks. Sukkur (Sindh) is somewhat similar to Rawalpindi and Jhelum. Conversely, Upper Dir and Buner are mountainous districts which are much more rural, have

[8] These include: HMIS coverage limited to PHC-level facilities and not DHQ/ THQ hospitals nor private sector clinics/hospitals; and lack of data on disease burden.

low literacy rates and more difficult access to health services. Lasbela and Jafarabad (Baluchistan) and DG Khan are socio-economically and demographically closer to Upper Dir and Buner. Dadu (Sindh) and Jhelum and Khanewal (Punjab) fall somewhere in the middle, with literacy rates slightly above the national average.[9]

The five non-intervention (i.e., control districts) are exhibiting demographic and socioeconomic characteristics similar to those of the intervention districts in terms of provincial rankings. Gujranwal (Punjab) has a developmental profile comparable to the Punjab PAIMAN districts Rawalpindi and Jhelum. Located on the Grand Trunk (GT) road in the plan of Central Punjab, the population density and literacy rates of this district are above the provincial average. Okara is somewhat less developed is similar to Khanewal in terms of population density and literacy rate[10]. In Baluchistan, Nasirabad (control) is similar to the PAIMAN district of Jafarabad (its literacy rate is equal to Jafarabad although its developmental rank[11] is lower than either Jafarabad or Lasebela. In Sindh, control district Shikarpur's developmental profile falls between those of Sukkur and Dadu. In NWFP, control district Lower Dir's developmental profile falls between those of Buner and Upper Dir.

The two GTZ districts of Nowshera and Mardan (NWFP) are at a higher developmental level than either the two PAIMAN districts (Upper Dir and Buner) of NWFP with Nowshera slightly better than Mardan (the adult literacy rate and primary school enrolment ratio are both higher than provincial averages). The MICS developmental ranking of control district Lower Dir is slightly higher but closer to the PAIMAN districts in NWFP[12].

3.1. Decision Space Analysis survey

The decision space approach developed by Thomas Bossert has guided this research (Bossert 1998). This approach defines decentralization in terms of the range of decision making that is allowed and exercised by local officials. Many other studies of decentralization describe the formal decision making power of different officials but do not assess the actual exercise of this formal authority. In many instances, there is a significant difference in the actual decision space that is exercised by different officials even from the same level or in the same districts. This study was designed to determine the actual exercise of decision making by different types of officials in the 10 districts that were examined in order to relate the decision making with capacities and with an assessment of the degree of local accountability. The study was developed to see if there was a relationship between the degree of actual exercised decision space and the

[9] PAIMAN, District Profiles of PAIMAN Districts.2006

[10] Govt. of the Punjab, Planning and Development, Federal Bureau of Statistics, UNICEF. District based Multiple Indicator Cluster Survey(MICS) Punjab; 2003-2004

[11] A composite or summary rank for groups of seven key indicators: Percent Literacy (10 years+); Net Primary School Enrolment (5-9 years); Percent Adequate Water and Sanitation; Percent with Skilled Attendant at Birth; Modern Contraceptive Use and Households with Electricity. Each of these indicators deals with people: not institutions or structures. Each is a key element of the MDG and/or pertains to a major aspect of human development.

[12] Govt. of the NWFP, Planning and Development, Federal Bureau of Statistics, UNICEF. District based Multiple Indicator Cluster Survey(MICS) NWFP; 2004

capacities to make and implement informed decisions as well as be responsive to appropriate mechanisms of local accountability. This report will refer to the terms of decision space, capacity and accountability as "dimensions" of decentralization.

Although similar surveys of decision space, capacities and accountability were implemented by Bossert in Nicaragua and Morocco, each country requires a significantly different set of questions that take into account the rules and regulations, local terminology and widely understood practices so that respondents would understand the detailed questions designed to elicit their actual range of choice for different functions. To develop these questions, a team from Contech and other partners in the PAIMAN project met with Thomas Bossert and reviewed the questions from Morocco and Nicaragua studies and modified them significantly to make them appropriate to the Pakistan context. These draft questionnaires were then field tested in two districts, revised and then implemented in 10 intervention districts (see Annex III for a sample final questionnaire administered to EDOH respondents–the full set is available from the authors).

The study was also designed to assess the differential impact of decision space, capacity and accountability for different functions on a series of performance indicators, including financial allocations, human resources management, and some health interventions. This performance data was collected separately from district management records.

3.1.1. Sample

Data were collected from 18 districts among seven categories of stakeholders in health for the Decision Space Analysis (DSA). The 10 PAIMAN districts represented in the survey included four from Punjab and two from each of the other three provinces: DG Khan, Khanewal, Rawalpindi, Jhelum, Sukkur, Dadu, Upper Dir, Buner, Lasbella, and Jafferabad. The GTZ districts include two from NWFP and Nowshera and Mardan. Five control districts were paired with the PAIMAN intervention districts for future analysis: Lower Dir, Okara, Gujranwala, Naseerabad, and Shikarpur. Lower Dir also serves as a control district for the GTZ intervention sites. Finally, Mehmand Agency was included as a Federally Administered Tribal Area (FATA) and non-devolved territory. Its administrative governance set-up is different than those of other districts and is included as a control for devolved and non-devolved districts. It is also representative of administrative structures for a significant portion of the FATA area.

The seven categories of stakeholders included six types of health professionals within the District Health Department (District Officer for Health (DOH), District Coordination Officer (DCO), Executive District Officers for Finance and Planning (EDOFP) and Health (EDOH), Medical Superintendent for District Headquarters Hospital (MS-DHQ), Tehsil Headquarters Hospital (MS-THQ)), and locally-elected officials (Nazim).

The survey design called for one respondent from each stakeholder category to be interviewed within each district, for a total sample pool of 126 respondents (i.e., seven stakeholders per district across 18 districts). During survey implementation, however,

the following stakeholders were not interviewed; DOHs in Upper Dir, Buner, Lasbella, and Jafferabad (who were not posted in those districts); Nazim in Dadu (who was out of the country) and Mehmand Agency (which does not have a Nazim position), MS THQs in Nowshera and Naseerabad (due to inexistence of THQ hospitals) and Mehmand Agency (because of post vacancy), and MS DHQs in Rawalpindi, Sukkur, and Upper Dir. The final sample therefore included 114 respondents.

3.1.2. Decision Space indicators

For each respondent, the DSA survey collected decision space data in up to five health functions: human resources (HR), financial management (FM), strategic and operational planning (S&OP), service organization (SO) and governance/local participation (G&LP). Within each health function, the survey included questions related to decision space, capacity and (when appropriate) accountability. As an example in financial management decision space, the six categories of respondents within the District Health Departments (DHD) were asked if they developed their own criteria for allocation of budgets or followed instructions of others; Nazim officials were asked a similar question about whether they discuss EDO/DCO-recommended budget revisions or accept them unchanged. For the six types of MOH respondents, developing their own criteria was considered high decision space while following others instructions was considered low decision space (analogously, Nazim respondents who discussed revisions with EDO/DCO officials had high decision space and those who accepted revisions unchanged had low decision space).

While some survey questions were applicable to most or all categories of respondents, a number of questions on decentralization sometimes differed by health function and by category of respondent. For instance, DCO respondents were asked 3 questions related to decision space in financial management, Nazim and MS-DHQ/MS-THQ respondents were asked four, DOH respondents were asked six, and EDO-FP/EDO-Health respondents were asked seven. The varying number of questions within a single health function but across category of respondent reflected differing roles and applicability of decision space, capacity and/or accountability. The varying number of questions between health functions reflected differences in the respective natures of decision space, capacity and/or accountability.

A uniform 3-point scale of the three dimensions of decentralization was adopted for all survey questions. In this scale, answers considered to represent low decision space were assigned a “1”, a moderate degree of decision space assigned a “2”, and a high degree of decision space assigned a “3”. Similar coding was used for capacity and accountability questions. For some questions, only low or high levels were applicable (e.g., see financial management decision space example previously illustrated). Criteria used to determine which indicators belonged to decision space, capacity and accountability, respectively, as well as what constituted high, medium and low levels of each were developed by Contech in consultation with Dr. Bossert.

3.2. District-level health data

Published data were collected on a variety of health-related indicators at the district level. These data were categorized into three broad areas: included statistics relating to human resources, budgets, and health services. There were five human resource management outcome indicators: percent of all staff posts in district filled (posts included three high-level administrative, 8 mid-level administration, 18 low-level administrative, 19 clinical, and 20 outreach worker positions); percent of Lady Health Visitors (LHV) posts filled in RHC; percent of Women Medical Officers (WMO) positions filled in RHC; percent availability of gyneacologists, pediatricians, and anesthetists in DHQ hospitals; and number of gyneacologists, pediatricians, and anesthetists available in THQ hospitals. There were two budgetary management outcome indicators: the health budget as a percent of the total district budget; and the percent health of health budget spent against the authorized budget (i.e., health expenditure rate). Budgetary management data were available for eight of the ten districts (DG Khan, Khanewal, Rawalpindi, Jhelum, Sukkur, Dadu Buner, and Lasbella), while data related to human resources management and health services were available for all districts.

The PAIMAN project implemented a survey of health services performance indicators that will be used to monitor and evaluate the project. While a previous report on findings related to PAIMAN districts only include five health services outcome indicators, this analysis selected three indicators comparable across all districts. These indicators are: the percent of births assisted by skilled birth attendants (SBA); the percent of women (15-49) with antenatal care (ANC) during current/last pregnancy; and the percent of women with 2+ doses of TT in last month. Given the high degree of correlation between the latter three indicators, a composite "MCH indicator" was created as the unweighted average of those three indicators.

4. STATISTICAL ANALYSES

Contech collected and inputted survey data into a database. Analyses of the DSA and district health indicators data were conducted by the Harvard School of Public Health. The findings presented in this report include two types of statistical analyses—univariate tabulations and correlations.

4.1. Univariate Tabulations

The univariate tabulations (Tables 1-11) describe mean decision space and capacity (by district) for five functions: financial management, human resources, strategic and operational planning, service organization, and governance/local participation. Mean (average) decision space, capacity and accountability in each of the functions was calculated by averaging scores across relevant decision space and capacity survey questions of all respondents. That is, mean scores for the three dimensions of decentralization were calculated in relation to the "grand mean" which pooled scores of all respondent and across all respondent categories.

In order to analyze the complex and varied set of responses from different officials about different characteristics we developed *new variables* to identify higher levels of decision space, capacities and accountability and the congruence between these dimensions. These

variables were based on mean decision space, capacity and accountability for each function at the district-level. These new variables were:

- **Above-average variables** for each of the dimensions (decision space, capacities, accountability) to identify those districts or types of officials who exercised more choice or had higher capacities or higher accountability than the mean for the entire sample. There were 11 of these variables constructed from the survey data.
- **Congruence indicators** which combines those districts with above average indicators first, within a function, as second across functions. These indicators will be used to show whether consistency among decision space/capacity/accountability is related to performance. In other words, do districts with more consistency among dimensions of decentralization perform better or worse than those with less consistency among the dimensions. There were 8 of these variables.

Above-Average Variables: While any one official in a given district may exhibit a particularly high or low level of decision space, capacity, and/or accountability, it is doubtful that his or her influence alone will affect district-wide outcomes. However, if the majority of respondents in a given district exhibit particularly high or low levels of decision space, capacity, and/or accountability, it may be that those factors can influence district-wide outcomes. To explore this possibility, *eleven "above-average" variables* in the three dimensions of decentralization were constructed. These variables assign respondents a "1" if their personal decision space/capacity/accountability score exceeded the sample (grand) mean decision space/capacity/accountability of the relevant function; respondents are assigned a "0" otherwise. On one extreme, if all respondents in a given district report above-average decision space, for example, the mean above-average score for that district will be 1. At the other extreme, the mean above-average score for that district will be 0 for districts in which no respondents report above-average decision space. In this way, indicators were developed for above-average: *decision space* in financial management, human resources, strategic & operational planning and service organization; *capacity* in financial management, human resources, strategic & operational planning, service organization and governance/local participation; and *accountability* in governance/local participation as well as governance/local participation and human resources.

Congruence Indicators: To refine district-level analysis even further, *eight new "congruence" indicators* were constructed on the basis of the "above-average" indicators just described. The first four measure congruence in decision space and capacity *within* a particular function. Thus respondents are assigned a "1" if their personal decision space and capacity scores are both above-average within FM, HR, S&OP, or SO, respectively; respondents are assigned a "0" otherwise. If the majority of respondents within a district have above-average space in financial management and capacity to act on that space, for instance, average congruence in FM for that district will be above 0.5. The last four congruence indicators relate to decision space and capacity *across* functions. Two of these indicators assign respondents a "1" if respondents' personal decision space scores for both FM and HR or S&OP and SO are above-average, respectively. The last two assign respondents a "1" if respondents' personal capacity scores for both FM and HR or

S&OP and SO are above-average.[13] If the majority of respondents within a district have below-average space in financial management and human resources, for instance, average decision space congruence in FM and HR for that district will be below 0.5.

Indicators of performance: We were limited in the possible indicators for performance that might be related to the dimensions of decentralization. We chose to examine data that were available from routine district data sources for human resources and budgets and from the evaluation of districts made by the PAIMAN project for service delivery data. These indicators may not be the most appropriate for measuring performance, as we will discuss later.

The human resources data available were percentage of posts filled for all staff, LHW and WMO, and percentage of specialists (obs/gyn, pediatricians and anesthetists) in DHQ and THQ hospitals. The hypothesis we suggest is that those districts with higher levels of decentralization dimensions should have higher percentages of these posts filled as a measure of their process performance.

The budgetary data we had was the ratio of health budget to total district budget and the ratio of health budget expenditures to authorized budgets. Our hypothesis is that those districts with higher levels of decentralization dimensions should have higher ratios of health to total budget and should be able to expend a higher percentage of their authorized budget.

For service delivery we used, percent of RHC providing basic Emergency obs/gyn and Neonatal Care (EmONC), percent THQ providing basic and comprehensive EmONC, percent skilled birth attendant (SBA) assisted births, and the two ANC indicators previously described. Again our hypothesis was that higher levels of decentralization dimensions should have higher levels of these service delivery indicators.

4.2. Correlations

Our next task was to determine the how decision space, capacities and accountability are related to some intermediate indicators of performance in the key functions for which we have some data (on budgets and human resources), and ultimately on some output data on health service delivery (on selected maternal and neonatal activities). Tables 12-14 describe the findings of these performance indicators.

This next section discusses some of the more technical methodological issues involved in the development of this analysis and may be hard going for some readers who can skip the methodological discussion and go on to the Findings.

In addition to univariate descriptions of decision space, capacity and accountability across the five functions, Pearson coefficients of correlation between the eight decision space indicators and district-level performance outcomes were estimated. Our underlying

[13] Congruence indicators related to category-specific means are provided in Annex I.

hypothesis for this analysis is that decision space, capacity and accountability at the district-level is systematically correlated with human resources management, budgetary management and health services indicators. In statistical terms (and given the feasible statistical methods available to test this hypothesis), we tested:

$$H_0 : \rho_{DS/CAP/ACCT,HR/BM/HS} = 0 \text{ against } H_1 : \rho_{DS/CAP/ACCT,HR/BM/HS} \neq 0$$

where *DS* is decision space, *CAP* is capacity, *ACCT* is accountability, *HR* is human resource management, *BM* is budgetary management, and *HS* is health services. In other words, we expected to find statistically significant relationships between our respective panels of decentralization and outcome indicators. For instance, districts that exhibit above-average decision space and/or capacity in human resources management might be more adept at filling staff vacancies when they arise; one might therefore expect to find a positive correlation between those indicators. Districts with above-average accountability in governance and local participation may prioritize delivery of health services; in that case, a positive correlation between accountability and the two ANC indicators could be possible.

Ideally, we would have refined and/or made more specific our hypotheses in two main ways. First, we could have hypothesized particular directions of associations for each test conducted. For instance, we could have tested the hypothesis that above-average district wide decision space in human resources management is positively correlated with the percentage of all staff posts filled. Second, we could have restricted pair-wise correlations to indicators with the most plausible and/or direct connections. One might expect capacity in human resources management to bear more of a relationship with percentage of all staff posts filled than that of local governance and participation. However, given the exploratory nature of the study and dearth of knowledge on decentralization and outcomes, we took neither of those tracks. Instead, we could not *a priori* specify in which direction we expected to find relationships.

Each coefficient of correlation in Tables 15-23 is presented with a p-value of statistical significance, with p-values ≤ 0.10 presented in **boldface** (while $p \leq 0.05$ is often used as the cutoff for statistical significance, the 10% confidence level cutoff was chosen in the face of a small sample size). Because not all categories of respondents may influence the outcome indicators equally, a second set of correlations were estimated in which respondents were stratified into two groups. Respondents who generally have a higher level of authority and/or whose responsibilities extend beyond the health sector made up one group; respondent categories in this group were: Nazim, DCO, EDOFP, and EDOH. Respondents with lower levels of authority and focused only on the health sector made up the second group (i.e., DOH, MS DQH, and MS THQ).

It should be noted that the small number of district-level data points upon which the correlations are based highly constrained statistical inference. While 114 respondents provided independent information on decision space, capacity and accountability, only a maximum of 18 analogous observations existed for the district-level outcome indicators. As a result, the 114 data points generated by the DSA survey had to be summarized into

18-district level values in order to be analyzed against the district-level variables. Therefore in the end, a maximum of 18 data points existed upon which to estimate correlations between data from the DSA survey and the district-level outcome data. One has most confidence in parametric statistical tests (such as the correlation coefficients analyzed here) when there are somewhat more data points (e.g., at least 20 or 25) for certain distributional assumptions to hold (e.g., the central limit theorem). While our relatively small sample size does not invalidate any of our findings, we cannot have as much confidence in the statistical significance of findings and ability to make statistical inferences based on the data.

5. RESULTS

5.1. Univariate Tabulations

5.1.1. Decision Space, Capacity, and Accountability

Using univariate analysis, we first analyzed the separate ranges of decision space, capacity and accountability among the 18 districts in order to show the differences in the actual decision space that different types of officials, and different districts reported exercising, the different administrative capacities and the different degrees of accountability. This analysis showed *significant differences among the types of officials, the districts and the specific functions.*

Univariate tabulations of decision space, capacity and accountability across the five functional domains are presented in Table 1, Table 2, and Table 3, respectively. Average **decision space** was **highest** for **strategic and operational planning and human resources, and lowest for service organization and financial management**. Interestingly, there was also a higher degree of variability for the two functions with the highest degree of decision space (i.e., S&OP and HR) compared to the functions with lower overall decision space (i.e., SO and FM). This means that although there was higher average decision space for two key functions, there were considerable differences among districts reporting the level of decision space for these functions. Both of these findings suggest that the **central rules for organizational and financial management have limited the range of choice for district officials relatively consistently, while districts have been able to take advantage of wider range of choice for planning and human resources management although some districts take more advantage than others.**

Average **capacity** in **HR was highest, followed by FM and G&LP, then S&OP and SO**. This suggests that while the level of decision space was consistent with capacity for in some functions (e.g., relatively high levels for each for human resources but low levels of each in service organization), it was not consistent for other functions (e.g., high decision space but low capacity in S&OP). Also, **capacity was higher than decision space across three of the four comparable functions** (the exception being S&OP). Finally, overall **accountability reported by**

respondents was relatively high compared to levels of decision space and capacity.

Analysis of variance (ANOVA) statistical tests revealed no significant differences (at the 5% level of confidence) in mean levels of decision space, capacity or accountability by type of district (i.e., PAIMAN intervention, GTZ intervention or control).

Table 4, Table 5, and Table 6 present average decision space, capacity, and accountability by **respondent category**, respectively. Similar to above, **levels of each vary significantly** for a particular category of respondent within each function and across functions. Within the S&OP function, for example, decision space ranged from around 1.8 for DOH to 2.9 for Nazim.

Table 7, Table 8, and Table 9 present the proportion of respondents within each district reporting **above-average decision space**, capacity and accountability, respectively. These tables suggest wide district-wide variations, wherein **some district have no respondents with above-average decentralization scores (e.g., FM and SO decision space in Jafferabad) while in others, all respondents are above the overall average for that function (e.g., FM DS in Gujranwala)**. There is also significant **variation by function**. In Rawalpindi, for example, more than 80% of respondents had above-average decision space and in FM and HR but none had above-average decision space in SO. It is also interesting that while a high proportion of **above-average level of decentralization in one function does not imply similar proportions in others, there does seem to be some degree of consistency of levels of each across functions**. For instance, at least two-thirds of respondents in Rawalpindi had above-average capacity in all five domains, while in Lower Dir, the proportion ranges from 0% (SO) to less than 30% (FM and G&LP).

Table 10 and Table 11 present findings related to **congruence of decision space and capacity by function and across functions**, respectively. Findings here mirror those for above-average decision space, capacity and accountability: there is **a wide degree of variation** in percentage of respondents with congruence, and **congruence in one health function does not imply congruence in another**.

5.1.2. District-level performance indicators

Table 12, Table 13, and Table 14 provide univariate tabulations of district-level indicators in human resource, budgetary and health services outcomes, respectively. **Some indicators exhibit a wide degree of variation**, such percent Woman Medical Officer posts filled and percent availability of select personnel at DHQ hospitals, both of which range from 0% to 100%. Such variation is useful for statistical analyses, providing more power to detect correlations. However, **several indicators have a relatively limited range** of values, including percent of all staff posts filled and the health budget as a proportion of the total district budget. This lack of variation makes it more difficult to find statistically significant correlations.

Analysis of variance (ANOVA) statistical tests revealed only one significant difference at the 5% level of confidence – the percent of district budget recurrent costs devoted to health – in mean levels of outcome indicators by type of district (i.e., PAIMAN intervention, GTZ intervention or control).

5.2. Correlations

Table 15 – Table 23 present results of analyses of correlations between mean decision space/capacity/accountability in each district and the human resources/budgetary/health services performance indicators. To gain insights into congruence between the three dimensions of decentralization.

5.2.1.Mean district decision space/capacity/accountability and Human Resources Management indicators

Table 15 presents correlations related to human resources outcome indicators. On the one hand, contrary to our hypotheses, it indicates **generally negative correlations between the decentralization dimensions and the overall percentage of staff posts filled, with significantly negative correlations in: three of the decision space functions (FM, S&OP, SO), capacity in SO, and accountability in G&LP/HR**. It is possible that higher leeway in organization of these functions in fact results in fewer posts being filled than a more rigidly implemented personnel system. On the other hand, significant **correlations with some of the other indicators are positive**, such as FM capacity with LHW posts, and HR capacity with WMO posts. While one might expect decision space, capacity and accountability in the HR function to exhibit the strongest associations (given that the outcomes relate to staffing), we found that HR correlations do not appear to be systematically stronger than those of other functions.

Table 18 and Table 19 present results of the stratified correlations separating the higher level district officials (DCO, Nazim, EDOH, EDOFP) from lower level officials ((DOH, MS DHQ, MS THQ). We tested these relationships assuming that some of the HR decisions about postings are made by different levels of officials assuming that the officials with cross sector responsibilities might be less aware of and involved in human resources in the health sector than are officials with direct health sector responsibilities. While there are many similarities for each, both in terms of directionality of correlations and statistical significance, there are also some intriguing differences. For example, among respondents with **higher authority, there are significantly positive correlations between the percentage of WMO posts filled and decision space in FM, capacity in HR, and accountability**. Associations are also positive among respondents at lower levels of the system, but none is significant. If the percentage of WMO posts filled represents higher-level policy choices, then this result may not be surprising. Conversely, **all but one of the decision space and capacity indicators among lower-level respondents are positively related to availability of personnel at DHQ hospitals, with decision space in FM and SO significant.** Among higher-level respondents, there appears to be as many negative correlations as positive and only one indicator approaches

significance. This, too, may not be surprising, given that staffing at the hospital level may have more to do with hospital-level personnel than actors such as the DCO or Nazim council.

5.2.2.Mean district decision space/capacity/accountability and Budgetary Management indicators

Table 16 presents overall correlations related to budgetary outcome indicators. Again contrary to our hypotheses, the **two significant indicators of budgetary performance were negatively associated with capacity in RM and G&LP**. When focusing on **respondents at higher levels (Table 20), the association with the health budget becomes stronger, with decision space in S&OP, capacity in FM and in G&LP now significantly negatively related**. It could be that health is not seen as a priority, and those who control the financial levers are shifting money away from the health sector. Conversely, Table 21 suggests that **lower-level health sector respondents do not influence the overall budget but may have positive impacts on the expenditure rate: both decision space and capacity in FM are positively associated with the latter indicator. As with human resources, it seems that higher level officials with more decision space, capacity or accountability are less likely to spend more of the budget on health. However, the officials directly involved in managing the health sector, if they have more decision space, capacity or accountability they are more likely to have higher levels of expenditure within their approved budgets**.

5.2.3.Mean district decision space/capacity/accountability and Health Services indicators

Table 17 presents overall correlations related to health services outcome indicators. IN this area our findings are closer to our hypotheses. **The percentage of births assisted by SBA and the two antenatal care indicators are positively (significantly) correlated with several of the decision space, capacity and accountability indicators** (the two emergency obstetric care indicators are not as consistently associated, but none of the correlations is significant). This finding may be consistent with those related to human resource outcome indicators: it could be that the positive associations between staffing of WMO posts and personnel at DHQ/THQ hospitals is also reflected in health services performed by those personnel (i.e., SBA-attended births and ANC-related practices). **Table 22 and Table 23 suggest that the positive correlations for the SBA/ANC indicators are similar whether the respondents have higher- or lower-level authority**. These findings may reflect the fact that since service delivery is the most visible aspect of the working of the health system, respondents with wider decision space, higher capacity and/or greater local accountability are responsive in better delivery of services.

6. SUMMARY OF FINDINGS

Findings related to decision space, capacity and accountability across the five functions of financial management, human resources, strategic and operational planning, service

organization and governance/local participation are intriguing and can elicit a number of explanatory hypotheses. In summary, this analysis found the following:

- **Levels of decision space, capacity and accountability:** As expected, we found **significant variations among the 10 districts and among different categories of officials along all dimensions of decentralization — decision space, capacity and accountability**. On the one hand, there was within-function variation in decision space, capacity and accountability at the district level. On the other hand, there was between-function variation among officials within a district of levels of decision space, capacity and/or accountability. While a district-by-district analysis of the precise relationships could be of use to officials in those districts, this study's findings suggests that there may be a general need to:
  1) **Develop capacity programs tailored to the different needs of each district — increasing capacities especially in those districts with low reported capacities**. For instance, the findings indicate that Jafferabad could benefit more from capacity-building focused specifically on service organization and governance and local participation, whereas Lasbella could benefit from across-the-board capacity-building.
  2) **Apprise districts reporting low decision space of the possibilities of making more independent choices**. This would be applicable to the HR and S&OP functions for Khanewal, or for the HR and SO functions for Upper Dir.
  3) **Apprise districts reporting low accountability of how to be more responsive to priorities of local officials.**

- **Congruence among decentralization dimensions:** There appears to be some degree of consistency of levels of the dimensions of decentralization within a particular function, but the **correspondence/consistency among dimensions varies from function to function**. Within a given function, the overall average level of decision space sometimes tracked with that of capacity and/or accountability (e.g., average decision space and capacity in service organization were both low compared to averages of the other functions). Yet this was not always the case (S&OP, for example). This finding reinforces the view that analyzing decentralization in a function-specific way can provide insights not apparent if one assumes decentralization is applied evenly across health functions. There may therefore be a need to:
  1) **Improve capacity or limit decision space for functions in which decision space is higher than capacity**. The findings of this study suggest that this is the case only for the S&OP function.
  2) **Use policy advocacy programs to increase decision space for functions in which capacity is higher than decision space**, based on evidence that existing capacity could lead to appropriate decisions and implementation. This applies to the FM, HR and SO functions.
  3) **Target joint decision space/capacity building efforts initially at districts with the low levels of both**. Dadu, Buner, Lasbella and Jafferabad, for instance, appear to have the least congruence both within- and between-function.

- **Decentralization and human resources performance:** We found that those districts that had **higher levels of decision space, capacity and accountability were least likely to have performed well on some dimensions of human resources staffing (percentage of all posts filled)**. However, further analysis indicated that higher-level staff (whose responsibilities go beyond the health sector) who reported more decision space were associated with a higher level of WMO posts filled, while lower-level administrative level staff with more decision space/capacity/accountability had more personnel available in DHQ hospitals.

- **Decentralization and budget performance:** There is mixed evidence of relationships between decision space, capacity and accountability and budgetary outcomes. On the one hand, **when higher level officials have higher levels of decentralization dimensions they tend to devote less of the district budgets to health. However, when the lower level officials who are responsible for the management of the health sector have higher levels of decentralization dimensions they have higher levels of expenditure within their allotted budgets.**

- **Decentralization and health service delivery:** Three of the health services indicators exhibited the most consistent (and positive) correlations among all the outcomes with the dimensions of decentralization. **The percentage of SBA-assisted births and two ANC indicators were almost universally positively associated with a variety of decision space, capacity, and accountability indicators (including several of the congruence indicators)**. One hypothesis offered was that since service delivery is the most visible aspect of the working of the health system, decentralization in decision space, coupled with capacity and accountability, may be associated with responsiveness to better delivery of services.

District-specific findings of the survey are summarized, and specific recommendations are provided, in Annex II. The district-by-district analyses may reflect only part of the actual situation and are best used to initiate discussion with district teams to confirm findings, as well as refine training and advocacy programs.

7. LIMITATIONS

There are four major limitations to this analysis. First, the data on decision space, capacity and accountability represent a subjective and not necessarily unbiased assessment of levels of each. There was no way to corroborate respondent answers to questions on decision space, capacities and accountability through documents or records. It is therefore possible that respondents provided biased responses due to fear of negative impressions. Indeed, difficulties in collecting financial and human resource data from districts suggested a reluctance on the part of officials to provide official records. Unfortunately, the direction(s) of these possible biases is not known.

Second, the statistical analyses are associative only and do not account for many factors which may influence the relationship between decision space, capacity and accountability and the selected outcomes. This analysis makes no pretense of causal relationship between decision space, capacity and accountability and the human resources, budgetary and health

services outcomes. Such inference would require data collected over time and applicability of statistical techniques that go well beyond the nature of the study and project.

Third, this analysis recognizes that a host of unmeasured factors may be responsible for the statistically significant relationships highlighted, factors which may have nothing to do with the decentralization process. District differences in socio-economic and demographic indicators (touched upon previously; see the section on Data) alone may account for much of the variation observed in the outcome indicators chosen. Indeed, the health indicators analyzed are closely related to district-level socio-economic and demographic characteristics previously described. If decision space, capacity and accountability are systematically correlated with those socio-economic and demographic indicators, then the correlations estimated in this analysis may be picking up on factors which have little to do with decentralization per se (though it would be an interesting finding in itself if levels of decision space/capacity/accountability are a function of more general socio-economic and demographic influences). This analysis was not able to take any of those factors into account at even the most basic level with commonly used statistical techniques (e.g., multivariable regression).

Finally, even within the confines of such an associative analysis, the small sample size at the district level (due to a lack of individual-level outcome data) further limited richness of the statistical analyses. As previously indicated, the number of datapoints drawn upon by the correlation estimates was less than ideal and limits ability to draw conclusions based on statistical inference. One should therefore be wary of over-interpreting the preliminary findings and recognize that significant correlations may be due to chance and do not reflect more widespread associations. Thus while some hypotheses have been offered in the Results and Summary of Findings sections to provide explanations for statistically significant associations, these are best viewed as motivators for future hypotheses that could be tested with a more extensive and complex study design. This study may best be considered as a starting point to providing policy guidance, one that can motivate future in-depth, complementary studies designed to more specifically test hypotheses related to decentralization and the health sector.

8. CONCLUSIONS AND RECOMMENDATIONS FOR PAIMAN

This study has demonstrated that there are significant variations in the decentralization process in Pakistan that might be taken into account in the process of capacity building in donor and government projects and in the development of future policies of decentralization decision space as well as defining mechanisms of local accountability.

One of the major activities that PAIMAN can be involved in is capacity building to improve capacities to carry out the wider decision space that districts are now exercising. We have found significant variation in the congruence among decision space, capacity and accountability among districts. In general we find that some districts have more decision space than they have capacity to implement the decisions and have more decision space than accountability to local authorities. This finding suggests that efforts be made to increase capacities through training programs and other system strengthening efforts targeted

especially to those districts that have low levels of congruence. For example, Table 10 shows that for almost all functions the average level of congruence is quite low suggestion a need to develop specific capacity building programs in financial and human resources management, service delivery, strategic planning and governance as a major effort to bring capacities in line with the range of decision space that district officials are exercising. However, we also find that for some functions some districts have more congruence than others — Rawalpindi, for instance, has more congruence for all functions except service organization than most other districts. Also, basic capacity assessments in Table 8 show that Jhelum, Khanewal, Rawalpindi and Sukkur have higher capacities in service organization than the other districts, suggesting a need to focus training and perhaps developing additional training sessions for the lower-capacity districts. While there does not seem to be as great a variation in human resources management, in financial management some districts are clearly lower in reported capacity than others and financial management training could similarly be tailored to the different capacities of these districts. The tables could be used to develop specific training programs for different districts tailored to their different needs. (See Annex II for an initial set of suggestions based on tables from the study. These tables should be discussed with the district teams to confirm the findings and refine the training and advocacy programs.)

The study also suggests targeting specific training for different types of officials. Table 5 could be used to identify those officials that have lower-than-average reported capacities for different functions and special training programs could be focused on building those capacities. For instance, although the EDOHs report the highest decision space for financial functions (Table 4) they report lower than average capacity in financial management.

A second area of initiatives for the PAIMAN project would be to develop advocacy program to change decision space and to address policies of accountability. Although in Table 1, Table 2, and Table 3 we find that capacity tracked higher than decision space, except for one function, the lack of congruence of high capacity and high decision space by specific respondents or specific districts suggests that it would not be prudent to increase decision space until capacities are brought in line with exercised decision space. It might be useful to use Table 1 and Table 4 to identify those specific districts and those specific officials who have exercised lower than average decision space and encourage them to assume decision making power. Specific examples from those districts or officials exercising higher levels of decision space could be used in advocacy packages targeted toward officials who are exercising lower than average decision space.

A third area to investigate more is the relationship between decentralization dimensions and performance. It is encouraging that higher levels of decision space, capacity and accountability are associated with higher levels of service delivery performance. However, the negative associations with human resources and budgetary indicators suggest that the project might attempt through interviews and focus groups, or during the course of capacity building efforts, to investigate how officials explain why some districts have lower achievement of human resource and budgetary performance than would be expected from their levels of capacity and decision space. On the basis of this investigation, training and system strengthening strategies for improving performance in these functions could be developed.

9. CITATIONS

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Annexure

ANNEX I: TABLES

Table 1: District-level Decision Space in Financial Management (FM), Human Resources (HR), Strategic & Operational Planning (S&OP), and Service Organization (SO)

	District	Decision Space (1=low; 2=medium; 3=high)											
		FM			HR			S&OP			SO		
		Mean	*SD*	*N*	*Mean*	*SD*	*N*	*Mean*	*SD*	*N*	*Mean*	*SD*	*N*
PAIMAN	**DG Khan**	1.97	0.38	*7*	1.67	0.33	*7*	2.64	0.48	*7*	2.00	0.24	*4*
	Khanewal	1.86	0.30	*7*	1.67	0.75	*7*	1.71	0.95	*7*	1.96	0.60	*4*
	Rawalpindi	2.15	0.29	*6*	2.31	0.75	*6*	2.42	0.80	*6*	1.56	0.19	*3*
	Jhelum	1.98	0.37	*7*	2.26	0.69	*7*	2.57	0.79	*7*	2.13	0.25	*4*
	Sukkur	1.93	0.31	*6*	1.97	0.56	*6*	2.58	0.66	*6*	2.00	0.73	*3*
	Dadu	1.78	0.63	*6*	2.11	0.58	*6*	1.50	0.55	*6*	1.58	0.50	*4*
	Upper Dir	1.90	0.65	*5*	1.87	0.87	*5*	2.10	0.89	*5*	1.33	0.47	*2*
	Buner	1.58	0.37	*6*	2.22	0.75	*6*	1.83	0.75	*6*	1.22	0.38	*3*
	Lasbella	1.53	0.51	*6*	1.86	0.48	*6*	1.67	0.82	*6*	1.33	0.58	*3*
	Jafferabad	1.41	0.23	*6*	1.94	0.53	*6*	1.67	0.82	*6*	1.50	0.29	*3*
GTZ	**Nowshera**	1.64	0.50	*6*	2.03	0.93	*6*	2.33	0.82	*6*	1.50	0.17	*3*
	Mardan	2.08	0.50	*7*	1.95	0.78	*7*	2.21	0.81	*7*	1.50	0.43	*4*
Control	**Lower Dir**	1.52	0.40	*7*	1.71	0.40	*7*	2.00	0.82	*7*	1.63	0.60	*4*
	M. Agency	1.63	0.67	*5*	2.20	0.77	*5*	1.70	0.45	*5*	1.28	0.25	*3*
	Okara	1.68	0.40	*7*	1.93	0.38	*7*	1.79	0.70	*7*	1.63	0.21	*4*
	Gujranwala	2.24	0.31	*7*	2.12	0.34	*7*	2.57	0.53	*7*	2.25	0.32	*4*
	Naseerabad	1.50	0.30	*6*	1.39	0.53	*6*	2.00	0.63	*6*	1.50	0.17	*3*
	Shikarpur	2.10	0.44	*7*	1.81	0.42	*7*	2.71	0.49	*7*	1.83	0.58	*4*
	Total	***1.81***	***0.47***	***114***	***1.94***	***0.62***	***114***	***2.13***	***0.78***	***114***	***1.68***	***0.47***	***62***

Table 2: District-level Capacity in Financial Management (FM), Human Resources (HR), Strategic & Operational Planning (S&OP), Service Organization (SO), and Governance and Local Participation (G&LP)

	District	Capacity (1=low; 2=medium; 3=high)														
		FM			HR			S&OP			SO			G&LP		
		Mean	*SD*	*N*	*Mean*	*SD*	*N*	*Mean*	*SD*	*N*	*Mean*	*SD*	*N*	*Mean*	*SD*	*N*
PAIMAN	**DG Khan**	2.07	0.44	*7*	2.25	0.50	*6*	2.04	0.94	*7*	1.86	0.25	*4*	1.88	0.82	*6*
	Khanewal	1.95	0.53	*7*	2.49	0.35	*6*	1.72	0.77	*7*	2.06	0.21	*4*	2.47	0.63	*6*
	Rawalpindi	2.33	0.48	*6*	2.56	0.30	*5*	2.42	0.80	*6*	2.02	0.28	*3*	2.71	0.40	*5*
	Jhelum	2.32	0.49	*7*	2.38	0.42	*6*	1.88	0.42	*7*	2.05	0.10	*4*	2.58	0.50	*6*
	Sukkur	2.19	0.49	*6*	2.33	0.45	*5*	2.03	0.73	*6*	1.97	0.06	*3*	2.08	0.62	*5*
	Dadu	1.66	0.38	*6*	2.20	0.25	*5*	1.53	0.68	*6*	1.94	0.22	*4*	1.57	0.80	*6*
	Upper Dir	2.06	0.62	*5*	2.36	0.76	*4*	1.81	0.74	*5*	1.38	0.18	*2*	1.78	0.57	*4*
	Buner	2.10	0.73	*6*	1.90	0.54	*5*	1.28	0.39	*6*	1.51	0.33	*3*	1.92	0.91	*5*
	Lasbella	1.82	0.68	*6*	2.11	0.64	*5*	1.78	0.45	*6*	1.75	0.16	*3*	2.23	0.47	*5*
	Jafferabad	2.03	0.67	*6*	2.36	0.48	*5*	2.31	0.79	*6*	1.71	0.41	*3*	1.64	0.64	*5*
GTZ	**Nowshera**	1.96	0.30	*6*	2.37	0.50	*5*	2.26	0.77	*6*	2.25	0.66	*3*	1.71	0.46	*5*
	Mardan	2.28	0.57	*7*	2.42	0.58	*6*	1.63	0.69	*7*	1.73	0.33	*4*	2.11	0.50	*6*
Control	**Lower Dir**	1.63	0.55	*7*	2.08	0.65	*6*	1.39	0.50	*7*	1.57	0.27	*4*	1.57	0.54	*6*
	M. Agency	1.67	0.46	*5*	2.25	0.52	*4*	1.58	0.43	*5*	1.62	0.25	*3*	1.63	0.38	*5*
	Okara	2.29	0.50	*7*	2.43	0.36	*6*	1.79	0.71	*7*	2.23	0.13	*4*	1.80	0.78	*6*
	Gujranwala	2.13	0.64	*7*	2.62	0.38	*6*	1.79	0.62	*7*	2.26	0.27	*4*	2.60	0.53	*6*
	Naseerabad	2.01	0.68	*6*	2.43	0.34	*5*	1.48	0.78	*6*	1.84	0.32	*3*	2.09	0.53	*5*
	Shikarpur	2.40	0.50	*7*	2.23	0.66	*6*	2.14	0.81	*7*	2.18	0.51	*4*	1.94	0.68	*6*
	Total	***2.06***	***0.56***	***114***	***2.32***	***0.48***	***96***	***1.82***	***0.71***	***114***	***1.91***	***0.36***	***62***	***2.02***	***0.67***	***98***

Table 3: District-level Accountability in Governance and Local Participation (G&LP) and G&LP + HR

	District	Accountability (1=low; 2=medium; 3=high)					
		G&LP			G&LP/HR		
		Mean	*SD*	*N*	*Mean*	*SD*	*N*
PAIMAN	**DG Khan**	2.42	0.73	*6*	2.41	0.67	*7*
	Khanewal	2.56	0.58	*6*	2.29	0.59	*7*
	Rawalpindi	2.71	0.29	*5*	2.58	0.28	*5*
	Jhelum	2.52	0.43	*6*	2.51	0.39	*7*
	Sukkur	2.70	0.35	*5*	2.78	0.27	*6*
	Dadu	2.47	0.48	*6*	2.39	0.39	*6*
	Upper Dir	2.68	0.47	*4*	2.47	0.61	*5*
	Buner	1.83	0.84	*5*	1.87	0.70	*6*
	Lasbella	2.52	0.45	*5*	2.26	0.74	*6*
	Jafferabad	2.39	0.83	*5*	2.04	0.85	*6*
GTZ	**Nowshera**	1.91	0.84	*5*	2.20	0.74	*6*
	Mardan	2.42	0.60	*6*	2.46	0.56	*7*
Control	**Lower Dir**	1.67	0.70	*6*	1.87	0.81	*7*
	M. Agency	1.61	0.74	*5*	1.76	0.68	*5*
	Okara	2.52	0.52	*6*	2.43	0.57	*7*
	Gujranwala	2.39	0.65	*6*	2.13	0.71	*7*
	Naseerabad	1.86	0.80	*5*	2.19	0.73	*6*
	Shikarpur	2.78	0.34	*6*	2.79	0.32	*7*
	Total	***2.34***	***0.66***	***98***	***2.31***	***0.63***	***113***

Table 4: Respondent-level Decision Space in Financial Management (FM), Human Resources (HR), Strategic & Operational Planning (S&OP), and Service Organization (SO), by respondent category

Respondent Category	Decision Space (1=low; 2=medium; 3=high)											
	FM			HR			S&OP			SO		
	Mean	*SD*	*N*	*Mean*	*SD*	*N*	*Mean*	*SD*	*N*	*Mean*	*SD*	*N*
DCO	1.74	0.51	*18*	2.26	0.58	*18*	2.33	0.77	*18*			*0*
DOH	1.66	0.48	*14*	2.00	0.45	*14*	1.82	0.64	*14*	1.61	0.50	*14*
EDO F&P	1.99	0.44	*18*	1.72	0.67	*18*	2.06	0.42	*18*			*0*
EDOH	2.03	0.55	*18*	2.30	0.51	*18*	1.89	0.72	*18*	1.69	0.39	*18*
Nazim	1.81	0.31	*16*	1.84	0.70	*16*	2.88	0.34	*16*			*0*
MS DHQ	1.81	0.32	*15*	1.87	0.59	*15*	1.87	0.99	*15*	1.76	0.58	*15*
MS THQ	1.58	0.50	*15*	1.51	0.42	*15*	2.00	0.93	*15*	1.68	0.45	*15*
Total	***1.81***	***0.47***	***114***	***1.94***	***0.62***	***114***	***2.13***	***0.78***	***114***	***1.68***	***0.47***	***62***

Table 5: Respondent-level Capacity in Financial Management (FM), Human Resources (HR), Strategic & Operational Planning (S&OP), Service Organization (SO), and Governance and Local Participation (G&LP)

Respondent Category	Capacity (1=low; 2=medium; 3=high)														
	FM			HR			S&OP			SO			G&LP		
	Mean	*SD*	*N*	*Mean*	*SD*	*N*	*Mean*	*SD*	*N*	*Mean*	*SD*	*N*	*Mean*	*SD*	*N*
DCO	2.10	0.28	*18*	2.58	0.33	*18*	2.02	0.57	*18*			*0*	2.22	0.65	*18*
DOH	1.84	0.60	*14*	2.14	0.26	*14*	1.50	0.52	*14*	1.87	0.34	*14*	2.05	0.50	*14*
EDO F&P	1.62	0.38	*18*			*0*	2.03	0.51	*18*			*0*	1.72	0.83	*18*
EDOH	2.03	0.33	*18*	2.38	0.28	*18*	1.73	0.52	*18*	2.02	0.33	*18*	2.07	0.51	*18*
Nazim	2.81	0.40	*16*	2.63	0.81	*16*	2.63	0.50	*16*			*0*			*0*
MS DHQ	2.22	0.45	*15*	2.16	0.25	*15*	1.33	0.72	*15*	2.00	0.34	*15*	2.02	0.66	*15*
MS THQ	1.81	0.59	*15*	1.96	0.34	*15*	1.40	0.74	*15*	1.72	0.39	*15*	2.07	0.79	*15*
Total	**2.06**	**0.56**	***114***	**2.32**	**0.48**	***96***	**1.82**	**0.71**	***114***	**1.91**	**0.36**	***62***	**2.02**	**0.67**	***98***

Table 6: Respondent-level Accountability in Governance and Local Participation (G&LP) and G&LP + HR

Respondent Category	Accountability (1=low; 2=medium; 3=high)					
	G&LP			G&LP/HR		
	Mean	*SD*	*N*	*Mean*	*SD*	*N*
DCO	2.56	0.86	*18*	2.13	0.57	*18*
DOH	2.08	0.47	*14*	2.08	0.47	*14*
EDO F&P	2.67	0.77	*18*	2.67	0.77	*18*
EDOH	2.36	0.47	*18*	2.43	0.38	*18*
Nazim			*0*	2.53	0.83	*15*
MS DHQ	2.20	0.55	*15*	2.20	0.55	*15*
MS THQ	2.02	0.54	*15*	2.02	0.54	*15*
Total	***2.34***	***0.66***	***98***	***2.31***	***0.63***	***113***

Table 7: Proportion of respondents in district reporting above-average Decision Space (comparison to sample average)

	District	Decision Space (1=low; 2=medium; 3=high)											
		FM			HR			S&OP			SO		
		Mean	*SD*	*N*	*Mean*	*SD*	*N*	*Mean*	*SD*	*N*	*Mean*	*SD*	*N*
PAIMAN	**DG Khan**	0.71	0.49	*7*	0.29	0.49	*7*	0.71	0.49	*7*	0.75	0.50	*4*
	Khanewal	0.57	0.53	*7*	0.43	0.53	*7*	0.29	0.49	*7*	0.75	0.50	*4*
	Rawalpindi	0.83	0.41	*6*	0.83	0.41	*6*	0.67	0.52	*6*	0.00	0.00	*3*
	Jhelum	0.57	0.53	*7*	0.86	0.38	*7*	0.71	0.49	*7*	1.00	0.00	*4*
	Sukkur	0.67	0.52	*6*	0.67	0.52	*6*	0.67	0.52	*6*	0.67	0.58	*3*
	Dadu	0.50	0.55	*6*	0.83	0.41	*6*	0.00	0.00	*6*	0.25	0.50	*4*
	Upper Dir	0.60	0.55	*5*	0.60	0.55	*5*	0.40	0.55	*5*	0.00	0.00	*2*
	Buner	0.17	0.41	*6*	0.83	0.41	*6*	0.17	0.41	*6*	0.00	0.00	*3*
	Lasbella	0.33	0.52	*6*	0.50	0.55	*6*	0.17	0.41	*6*	0.33	0.58	*3*
	Jafferabad	0.00	0.00	*6*	0.67	0.52	*6*	0.17	0.41	*6*	0.00	0.00	*3*
GTZ	**Nowshera**	0.33	0.52	*6*	0.50	0.55	*6*	0.50	0.55	*6*	0.00	0.00	*3*
	Mardan	0.71	0.49	*7*	0.57	0.53	*7*	0.43	0.53	*7*	0.25	0.50	*4*
Control	**Lower Dir**	0.29	0.49	*7*	0.29	0.49	*7*	0.29	0.49	*7*	0.25	0.50	*4*
	M. Agency	0.40	0.55	*5*	0.80	0.45	*5*	0.00	0.00	*5*	0.00	0.00	*3*
	Okara	0.29	0.49	*7*	0.71	0.49	*7*	0.14	0.38	*7*	0.25	0.50	*4*
	Gujranwala	1.00	0.00	*7*	0.71	0.49	*7*	0.57	0.53	*7*	1.00	0.00	*4*
	Naseerabad	0.17	0.41	*6*	0.17	0.41	*6*	0.17	0.41	*6*	0.00	0.00	*3*
	Shikarpur	0.71	0.49	*7*	0.57	0.53	*7*	0.71	0.49	*7*	0.75	0.50	*4*
	Total	***0.50***	***0.50***	***114***	***0.60***	***0.49***	***114***	***0.39***	***0.49***	***114***	***0.39***	***0.49***	***62***

Table 8: Proportion of respondents in district reporting above-average Capacity (comparison to sample average)

	District	Capacity (1=low; 2=medium; 3=high)													
		FM			HR			S&OP			SO			G&LP		
		Mean	*SD*	*N*	*Mean*	*SD*	*N*	*Mean*	*SD*	*N*	*Mean*	*SD*	*N*	*Mean*	*SD*	*N*
PAIMAN	**DG Khan**	0.43	0.53	*7*	0.50	0.55	*6*	0.43	0.53	*7*	0.25	0.50	*4*	0.33	0.52	*6*
	Khanewal	0.29	0.49	*7*	0.67	0.52	*6*	0.43	0.53	*7*	0.75	0.50	*4*	0.67	0.52	*6*
	Rawalpindi	0.83	0.41	*6*	0.80	0.45	*5*	0.83	0.41	*6*	0.67	0.58	*3*	1.00	0.00	*5*
	Jhelum	0.71	0.49	*7*	0.67	0.52	*6*	0.71	0.49	*7*	1.00	0.00	*4*	0.83	0.41	*6*
	Sukkur	0.50	0.55	*6*	0.40	0.55	*5*	0.67	0.52	*6*	0.67	0.58	*3*	0.40	0.55	*5*
	Dadu	0.17	0.41	*6*	0.40	0.55	*5*	0.33	0.52	*6*	0.50	0.58	*4*	0.17	0.41	*6*
	Upper Dir	0.60	0.55	*5*	0.50	0.58	*4*	0.20	0.45	*5*	0.00	0.00	*2*	0.25	0.50	*4*
	Buner	0.50	0.55	*6*	0.00	0.00	*5*	0.17	0.41	*6*	0.00	0.00	*3*	0.40	0.55	*5*
	Lasbella	0.17	0.41	*6*	0.40	0.55	*5*	0.67	0.52	*6*	0.00	0.00	*3*	0.40	0.55	*5*
	Jafferabad	0.50	0.55	*6*	0.60	0.55	*5*	0.67	0.52	*6*	0.33	0.58	*3*	0.40	0.55	*5*
GTZ	**Nowshera**	0.17	0.41	*6*	0.40	0.55	*5*	0.67	0.52	*6*	0.67	0.58	*3*	0.20	0.45	*5*
	Mardan	0.57	0.53	*7*	0.50	0.55	*6*	0.29	0.49	*7*	0.25	0.50	*4*	0.33	0.52	*6*
Control	**Lower Dir**	0.29	0.49	*7*	0.17	0.41	*6*	0.29	0.49	*7*	0.00	0.00	*4*	0.17	0.41	*6*
	M. Agency	0.20	0.45	*5*	0.25	0.50	*4*	0.40	0.55	*5*	0.00	0.00	*3*	0.00	0.00	*5*
	Okara	0.57	0.53	*7*	0.67	0.52	*6*	0.43	0.53	*7*	1.00	0.00	*4*	0.33	0.52	*6*
	Gujranwala	0.43	0.53	*7*	0.83	0.41	*6*	0.57	0.53	*7*	1.00	0.00	*4*	0.83	0.41	*6*
	Naseerabad	0.50	0.55	*6*	0.40	0.55	*5*	0.17	0.41	*6*	0.33	0.58	*3*	0.20	0.45	*5*
	Shikarpur	0.71	0.49	*7*	0.50	0.55	*6*	0.71	0.49	*7*	0.75	0.50	*4*	0.33	0.52	*6*
	Total	***0.46***	***0.50***	***114***	***0.49***	***0.50***	***96***	***0.48***	***0.50***	***114***	***0.48***	***0.50***	***62***	***0.41***	***0.49***	***98***

Table 9: Proportion of respondents in district reporting above-average Accountability (comparison to sample average)

	District	Accountability (1=low; 2=medium; 3=high)					
		G&LP			G&LP/HR		
		Mean	*SD*	*N*	*Mean*	*SD*	*N*
PAIMAN	**DG Khan**	0.67	0.52	*6*	0.71	0.49	*7*
	Khanewal	0.67	0.52	*6*	0.57	0.53	*7*
	Rawalpindi	0.80	0.45	*5*	1.00	0.00	*5*
	Jhelum	0.50	0.55	*6*	0.71	0.49	*7*
	Sukkur	0.80	0.45	*5*	1.00	0.00	*6*
	Dadu	0.50	0.55	*6*	0.67	0.52	*6*
	Upper Dir	0.75	0.50	*4*	0.60	0.55	*5*
	Buner	0.20	0.45	*5*	0.33	0.52	*6*
	Lasbella	0.40	0.55	*5*	0.50	0.55	*6*
	Jafferabad	0.60	0.55	*5*	0.50	0.55	*6*
GTZ	**Nowshera**	0.40	0.55	*5*	0.50	0.55	*6*
	Mardan	0.50	0.55	*6*	0.57	0.53	*7*
Control	**Lower Dir**	0.17	0.41	*6*	0.29	0.49	*7*
	M. Agency	0.20	0.45	*5*	0.20	0.45	*5*
	Okara	0.50	0.55	*6*	0.57	0.53	*7*
	Gujranwala	0.50	0.55	*6*	0.57	0.53	*7*
	Naseerabad	0.20	0.45	*5*	0.67	0.52	*6*
	Shikarpur	0.67	0.52	*6*	1.00	0.00	*7*
	Total	0.50	0.50	*98*	0.61	0.49	*113*

Table 10: Congruence in above-average Decision Space and Capacity, by function (comparison to sample average)

	District	Congruence in Decision Space & Capacity													
		FM			HR			S&OP			SO			G&LP		
		Mean	*SD*	*N*	*Mean*	*SD*	*N*	*Mean*	*SD*	*N*	*Mean*	*SD*	*N*	*Mean*	*SD*	*N*
PAIMAN	**DG Khan**	0.29	0.49	*7*	0.00	0.00	*6*	0.43	0.53	*7*	0.25	0.50	*4*	0.33	0.52	*6*
	Khanewal	0.14	0.38	*7*	0.17	0.41	*6*	0.29	0.49	*7*	0.50	0.58	*4*	0.50	0.55	*6*
	Rawalpindi	0.67	0.52	*6*	0.60	0.55	*5*	0.50	0.55	*6*	0.00	0.00	*3*	0.80	0.45	*5*
	Jhelum	0.29	0.49	*7*	0.67	0.52	*6*	0.43	0.53	*7*	1.00	0.00	*4*	0.50	0.55	*6*
	Sukkur	0.33	0.52	*6*	0.40	0.55	*5*	0.67	0.52	*6*	0.33	0.58	*3*	0.40	0.55	*5*
	Dadu	0.17	0.41	*6*	0.20	0.45	*5*	0.00	0.00	*6*	0.00	0.00	*4*	0.00	0.00	*6*
	Upper Dir	0.40	0.55	*5*	0.50	0.58	*4*	0.20	0.45	*5*	0.00	0.00	*2*	0.00	0.00	*4*
	Buner	0.17	0.41	*6*	0.00	0.00	*5*	0.17	0.41	*6*	0.00	0.00	*3*	0.00	0.00	*5*
	Lasbella	0.17	0.41	*6*	0.00	0.00	*5*	0.17	0.41	*6*	0.00	0.00	*3*	0.00	0.00	*5*
	Jafferabad	0.00	0.00	*6*	0.40	0.55	*5*	0.17	0.41	*6*	0.00	0.00	*3*	0.20	0.45	*5*
GTZ	**Nowshera**	0.00	0.00	*6*	0.40	0.55	*5*	0.50	0.55	*6*	0.00	0.00	*3*	0.20	0.45	*5*
	Mardan	0.57	0.53	*7*	0.50	0.55	*6*	0.29	0.49	*7*	0.00	0.00	*4*	0.17	0.41	*6*
Control	**Lower Dir**	0.00	0.00	*7*	0.17	0.41	*6*	0.14	0.38	*7*	0.00	0.00	*4*	0.00	0.00	*6*
	M. Agency	0.20	0.45	*5*	0.25	0.50	*4*	0.00	0.00	*5*	0.00	0.00	*3*	0.00	0.00	*5*
	Okara	0.14	0.38	*7*	0.50	0.55	*6*	0.14	0.38	*7*	0.25	0.50	*4*	0.17	0.41	*6*
	Gujranwala	0.43	0.53	*7*	0.67	0.52	*6*	0.29	0.49	*7*	1.00	0.00	*4*	0.50	0.55	*6*
	Naseerabad	0.00	0.00	*6*	0.00	0.00	*5*	0.17	0.41	*6*	0.00	0.00	*3*	0.00	0.00	*5*
	Shikarpur	0.57	0.53	*7*	0.17	0.41	*6*	0.43	0.53	*7*	0.50	0.58	*4*	0.33	0.52	*6*
	Total	**0.25**	**0.44**	***114***	**0.31**	**0.47**	***96***	**0.28**	**0.45**	***114***	**0.24**	**0.43**	***62***	**0.23**	**0.43**	***98***

Table 11: Congruence in above-average Decision Space and Capacity, across functions (comparison to sample average)

	District	Decision Space						Capacity					
		FM/HR			S&OP/SO			FM/HR			S&OP/SO		
		Mean	*SD*	*N*	*Mean*	*SD*	*N*	*Mean*	*SD*	*N*	*Mean*	*SD*	*N*
PAIMAN	**DG Khan**	0.00	0.00	*7*	0.75	0.50	*4*	0.17	0.41	*6*	0.25	0.50	*4*
	Khanewal	0.29	0.49	*7*	0.25	0.50	*4*	0.17	0.41	*6*	0.25	0.50	*4*
	Rawalpindi	0.67	0.52	*6*	0.00	0.00	*3*	0.80	0.45	*5*	0.33	0.58	*3*
	Jhelum	0.43	0.53	*7*	1.00	0.00	*4*	0.50	0.55	*6*	0.50	0.58	*4*
	Sukkur	0.50	0.55	*6*	0.33	0.58	*3*	0.40	0.55	*5*	0.33	0.58	*3*
	Dadu	0.50	0.55	*6*	0.00	0.00	*4*	0.00	0.00	*5*	0.00	0.00	*4*
	Upper Dir	0.40	0.55	*5*	0.00	0.00	*2*	0.50	0.58	*4*	0.00	0.00	*2*
	Buner	0.00	0.00	*6*	0.00	0.00	*3*	0.00	0.00	*5*	0.00	0.00	*3*
	Lasbella	0.17	0.41	*6*	0.00	0.00	*3*	0.20	0.45	*5*	0.00	0.00	*3*
	Jafferabad	0.00	0.00	*6*	0.00	0.00	*3*	0.40	0.55	*5*	0.33	0.58	*3*
GTZ	**Nowshera**	0.17	0.41	*6*	0.00	0.00	*3*	0.00	0.00	*5*	0.33	0.58	*3*
	Mardan	0.43	0.53	*7*	0.25	0.50	*4*	0.33	0.52	*6*	0.00	0.00	*4*
Control	**Lower Dir**	0.14	0.38	*7*	0.25	0.50	*4*	0.17	0.41	*6*	0.00	0.00	*4*
	M. Agency	0.40	0.55	*5*	0.00	0.00	*3*	0.00	0.00	*4*	0.00	0.00	*3*
	Okara	0.29	0.49	*7*	0.00	0.00	*4*	0.67	0.52	*6*	0.25	0.50	*4*
	Gujranwala	0.71	0.49	*7*	0.50	0.58	*4*	0.33	0.52	*6*	0.25	0.50	*4*
	Naseerabad	0.00	0.00	*6*	0.00	0.00	*3*	0.20	0.45	*5*	0.00	0.00	*3*
	Shikarpur	0.43	0.53	*7*	0.75	0.50	*4*	0.33	0.52	*6*	0.50	0.58	*4*
	Total	***0.31***	***0.46***	***114***	***0.26***	***0.44***	***62***	***0.29***	***0.46***	***96***	***0.19***	***0.40***	***62***

Table 12: Human Resource outcome indicators

	District	Human Resource Indicators									
		% staff posts filled*		% LHV** posts filled		% WMO*** posts filled		% availability of gyn / ped / anesth at DHQ hospitals		# gyn / ped / anesth per THQ hospital†	
		Mean	*SD*	*Mean*	*SD*	*Mean*	*SD*	*Mean*	*SD*	*Mean*	*SD*
PAIMAN	**DG Khan**	0.81		0.67		0.67		1.00			
	Khanewal	0.88	0.00	1.00	0.00	1.00	0.00	1.00	0.00	2.00	0.00
	Rawalpindi	0.79		0.90		0.70				2.00	
	Jhelum	0.75	0.00	0.80	0.00	0.40	0.00	0.67	0.00	1.00	0.00
	Sukkur	0.73		0.67		0.67		0.67		1.00	
	Dadu	0.77	0.00	0.33	0.00	0.67	0.00	0.33	0.00	0.00	0.00
	Upper Dir	0.89		0.67		0.67				3.00	
	Buner	0.92	0.00	1.00	0.00	0.00	0.00	0.67	0.00	0.00	0.00
	Lasbella	0.92		0.50		0.50					
	Jafferabad	0.95	0.00	1.00	0.00	0.00	0.00	0.33	0.00	0.00	0.00
GTZ	**Nowshera**	0.94		1.00		0.10		1.00			
	Mardan	0.97	0.00	1.00	0.00	0.10	0.00	1.00	0.00	0.00	0.00
Control	**Lower Dir**	0.96		1.00		0.08		0.33		2.00	
	M. Agency	0.00	0.00	0.00	0.00		0.00	0.00	0.00	0.00	
	Okara	0.68		0.93		0.48		1.00		1.00	
	Gujranwala	0.88		0.90		0.67		1.00		2.00	
	Naseerabad	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
	Shikarpur	0.83		0.53		0.64		0.44			
	Total	***0.85***	***0.09***	***0.81***	***0.21***	***0.46***	***0.30***	***0.59***	***0.38***	***0.93***	***1.00***

* including: high-level administration; mid-level administration; clinical; low-level administration; and outreach workers
** LHV: Lady Health Visitors
*** WMO: Women Medical Officers
† gyn/ped/anesth: gyneacologists/pediatricians/anesthetists

Table 13: Budgetary management outcome indicators

	District	Budgetary Indicators			
		Health budget / total district budget††		Health expenditures /authorized budget††	
		Mean	*SD*	*Mean*	*SD*
PAIMAN	**DG Khan**	0.14		0.89	
	Khanewal	0.15	0.00	0.88	0.00
	Rawalpindi	0.10		0.89	
	Jhelum	0.16	0.00	0.92	0.00
	Sukkur	0.12		0.73	
	Dadu	0.12	0.00	0.75	0.00
	Upper Dir				
	Buner	0.13	0.00	0.98	0.00
	Lasbella	0.16		0.73	
	Jafferabad	0.00	0.00	0.00	
GTZ	**Nowshera**	0.09		0.94	
	Mardan	0.08	0.00	0.91	0.00
Control	**Lower Dir**	0.10		0.96	
	M. Agency	0.00	0.00	0.00	
	Okara	0.09		0.98	
	Gujranwala	0.00	0.00	0.00	
	Naseerabad				
	Shikarpur	0.13	0.00	1.00	0.00
	Total	***0.12***	***0.03***	***0.89***	***0.09***

†† recurrent costs only

Table 14: Health services outcome indicators

	District	Health Services Outcome Indicators							
		% SBA-assisted births		% women with ANC during pregnancy		% women with 2+ doses of TT		Composite MCH indicator	
		Mean	*SD*	*Mean*	*SD*	*Mean*	*SD*	*Mean*	*SD*
PAIMAN	**DG Khan**	0.26		0.47		0.53		0.42	
	Khanewal	0.22	0.00	0.34	0.00	0.69	0.00	0.42	0.00
	Rawalpindi	0.65		0.73		0.80		0.73	
	Jhelum	0.46	0.00	0.72	0.00	0.93	0.00	0.70	0.00
	Sukkur					0.53		0.53	
	Dadu					0.53	0.00	0.53	0.00
	Upper Dir	0.19		0.27		0.56		0.34	
	Buner	0.30	0.00	0.29	0.00	0.55	0.00	0.38	0.00
	Lasbella	0.13		0.21		0.52		0.29	
	Jafferabad	0.08	0.00	0.12	0.00	0.53	0.00	0.24	0.00
GTZ	**Nowshera**	0.33		0.39		0.66		0.46	
	Mardan	0.33	0.00	0.36	0.00	0.66	0.00	0.45	0.00
Control	**Lower Dir**	0.34		0.22		0.57		0.37	
	M. Agency					0.25	0.00	0.25	0.00
	Okara	0.26		0.31		0.70		0.42	
	Gujranwala	0.45	0.00	0.53	0.00	0.84	0.00	0.61	0.00
	Naseerabad	0.14		0.15		0.29		0.19	
	Shikarpur	0.14	0.00	0.30	0.00	0.53	0.00	0.32	0.00
	Total	***0.29***	***0.15***	***0.36***	***0.18***	***0.59***	***0.16***	***0.43***	***0.15***

* % women (15-49) with: 1) antenatal care (ANC) during current/last pregnancy; and 2) 2+ doses of TT in last month

** %: 1) women receiving postpartum care within 24 hours after birth (home and hospital deliveries); and 2) newborns breastfed within 1 hour of birth

Table 15: Mean district-level decision space/capacity/accountability and human resources outcome indicators

Indicator		Human Resource Process Indicators (n = 16)									
		% staff posts filled		% LHV posts filled		% WMO posts filled		% avail. of gyn/ ped/ane. at DHQ hosp		# gyn/ped/ ane per THQ hospital	
		Corr	*p-value*	Corr	*p-value*	Corr	*p-value*	Corr	*p-value*	Corr	*p-value*
Decision Space	FM	-0.33	0.22	-0.16	0.56	0.57	***0.02***	0.20	0.45	0.26	0.35
	HR	-0.23	0.14	0.07	0.54	-0.19	0.65	-0.13	0.39	-0.02	0.91
	S&OP	-0.23	0.39	-0.02	0.78	0.18	0.47	0.24	0.62	0.13	0.94
	SO	-0.43	0.40	-0.05	0.33	0.50	***0.10***	0.49	0.29	0.17	***0.07***
Capacity	FM	-0.39	0.39	0.17	0.94	0.12	0.50	0.23	0.36	-0.03	0.64
	HR	-0.23	0.49	0.26	0.97	0.43	0.52	0.28	0.69	0.48	0.95
	S&OP	-0.19	***0.09***	-0.01	0.86	0.17	***0.05***	-0.11	***0.05***	0.02	0.54
	SO	-0.49	***0.05***	0.00	0.99	0.36	0.17	0.50	***0.05***	-0.04	0.90
	G&LP	-0.19	0.48	0.13	0.62	0.45	***0.08***	0.08	0.77	0.30	0.27
Accountability	G&LP	-0.54	***0.03***	-0.50	***0.05***	0.72	***<0.01***	-0.20	0.45	0.07	0.81
	G&LP/HR	-0.63	***<0.01***	-0.50	***0.05***	0.58	***0.02***	-0.05	0.85	-0.02	0.95

Table 16: Mean district-level decision space/capacity/accountability and budgetary outcome indicators

Indicator		Budgetary Outcome Indicators (N = 13)			
		Health budget / total district budget		Health expenditures /authorized budget	
		Corr	*p-value*	Corr	*p-value*
Decision Space	FM	0.04	0.89	0.05	0.87
	HR	-0.08	0.90	-0.01	0.18
	S&OP	0.00	0.79	0.26	0.97
	SO	0.39	0.41	-0.05	0.96
Capacity	FM	-0.04	1.00	0.39	0.39
	HR	-0.25	0.83	0.02	1.00
	S&OP	-0.07	0.19	0.00	0.87
	SO	-0.08	0.80	0.12	0.70
	G&LP	0.40	0.18	-0.12	0.71
Accountability	G&LP	0.33	0.28	-0.36	0.23
	G&LP/HR	0.10	0.75	-0.23	0.45

Table 17: Mean district-level decision space/capacity/accountability and health services outcome indicators

Indicator		Health Services Outcome Indicators (N = 18)							
		% SBA-assisted births*		% women with ANC during pregnancy*		% women with 2+ doses of TT		Composite MCH indicator	
		Corr	*p-value*	Corr	*p-value*	Corr	*p-value*	Corr	*p-value*
Decision Space	FM	0.57	***0.03***	0.73	***<0.01***	0.56	***0.01***	0.68	***<0.01***
	HR	0.68	0.24	0.64	***0.04***	0.43	***0.03***	0.60	***0.09***
	S&OP	0.49	***<0.01***	0.67	***<0.01***	0.40	***0.07***	0.49	***<0.01***
	SO	0.31	0.20	0.55	0.11	0.54	***0.07***	0.55	0.10
Capacity	FM	0.32	***0.07***	0.53	***<0.01***	0.52	***0.10***	0.41	***0.04***
	HR	0.35	0.55	0.43	0.18	0.44	0.19	0.40	0.23
	S&OP	0.17	0.25	0.37	***0.04***	0.33	***0.02***	0.30	***0.02***
	SO	0.30	0.28	0.45	***0.09***	0.51	***0.03***	0.49	***0.04***
	G&LP	0.58	***0.02***	0.70	***<0.01***	0.62	***<0.01***	0.59	***<0.01***
Accountability	G&LP	0.05	0.87	0.36	0.18	0.48	***0.05***	0.41	***0.09***
	G&LP/HR	0.13	0.66	0.44	0.10	0.35	0.15	0.43	***0.07***

* N = 15

Table 18: Mean district-level decision space/capacity/accountability (DCO, Nazim, EDOH, EDOFP respondents only) and human resources outcome indicators

Indicator		Human Resource Process Indicators (N = 16)									
		% staff posts filled		% LHV posts filled		% WMO posts filled		% avail. of gyn/ ped/ane. at DHQ hosp		# gyn/ped/ ane per THQ hospital	
		Corr	*p-value*	Corr	*p-value*	Corr	*p-value*	Corr	*p-value*	Corr	*p-value*
Decision Space	FM	-0.11	0.67	-0.37	0.16	0.43	***0.10***	0.01	0.96	0.19	0.49
	HR	-0.07	0.31	0.32	0.62	-0.15	0.91	-0.03	0.89	0.21	0.94
	S&OP	-0.19	0.78	0.09	0.23	0.03	0.59	0.23	0.91	0.02	0.46
	SO	-0.18	0.83	0.14	0.33	0.39	0.28	0.44	0.21	0.13	0.26
Capacity	FM	-0.27	0.48	0.14	0.73	0.03	0.90	0.04	0.39	-0.02	0.94
	HR	-0.06	0.38	0.26	0.45	0.29	0.27	0.33	0.73	0.31	0.56
	S&OP	-0.23	0.50	-0.20	0.60	0.29	0.14	0.10	***0.09***	-0.16	0.63
	SO	-0.50	***0.05***	-0.19	0.49	0.39	0.13	0.19	0.48	-0.11	0.69
	G&LP	-0.09	0.74	0.10	0.71	0.45	***0.08***	0.28	0.29	0.18	0.52
Accountability	G&LP	-0.33	0.21	-0.40	0.13	0.65	***<0.01***	-0.04	0.89	0.00	0.99
	G&LP/HR	-0.42	0.11	-0.40	0.12	0.39	0.14	0.09	0.73	-0.10	0.73

Table 19: Mean district-level decision space/capacity/accountability (DOH, MS DHQ, MS THQ respondents only) and human resources outcome indicators

Indicator		Human Resource Process Indicators (N = 16)									
		% staff posts filled		% LHV posts filled		% WMO posts filled		% avail. of gyn/ ped/ane. at DHQ hosp		# gyn/ped/ ane per THQ hospital	
		Corr	*p-value*	Corr	*p-value*	Corr	*p-value*	Corr	*p-value*	Corr	*p-value*
Decision Space	FM	-0.47	***0.07***	0.16	0.54	0.40	0.12	0.45	***0.08***	-0.01	0.97
	HR	-0.25	0.12	-0.29	0.41	-0.12	0.65	0.00	***0.04***	-0.54	0.57
	S&OP	-0.24	0.35	-0.09	0.27	0.23	0.66	0.32	0.99	0.05	***0.04***
	SO	-0.42	0.17	-0.10	0.55	0.41	0.45	0.45	0.25	0.06	0.91
Capacity	FM	-0.41	0.38	0.22	0.74	0.12	0.38	0.52	0.22	-0.16	0.86
	HR	-0.36	0.48	0.16	0.54	0.20	0.92	0.31	0.55	0.03	0.88
	S&OP	-0.19	0.10	0.16	0.71	0.03	0.12	-0.16	***0.08***	0.04	0.82
	SO	-0.42	0.11	0.07	0.80	0.28	0.30	0.60	***0.01***	-0.04	0.88
	G&LP	-0.17	0.54	0.07	0.80	0.27	0.31	-0.35	0.18	0.41	0.13
Accountability	G&LP	-0.74	***<0.01***	-0.46	***0.08***	0.62	***<0.01***	-0.16	0.57	-0.04	0.88
	G&LP/HR	-0.74	***<0.01***	-0.46	***0.08***	0.62	***<0.01***	-0.16	0.57	-0.04	0.88

Table 20: Mean district-level decision space/capacity/accountability (DCO, Nazim, EDOH, EDOFP respondents only) and budgetary outcome indicators

Indicator		Budgetary Outcome Indicators (N = 13)			
		Health budget / total district budget		Health expenditures /authorized budget	
		Corr	*p-value*	Corr	*p-value*
Decision Space	FM	-0.15	0.62	-0.24	0.42
	HR	-0.45	0.56	0.15	0.32
	S&OP	-0.30	0.12	0.31	0.64
	SO	0.26	0.45	0.05	0.50
Capacity	FM	-0.18	0.32	0.30	0.30
	HR	-0.23	0.98	-0.21	0.79
	S&OP	-0.01	0.39	0.08	0.88
	SO	0.03	0.93	0.21	0.48
	G&LP	0.41	0.16	-0.08	0.80
Accountability	G&LP	0.24	0.43	-0.31	0.31
	G&LP/HR	-0.11	0.71	-0.11	0.71

Table 21: Mean district-level decision space/capacity/accountability (DOH, MS DHQ, MS THQ respondents only) and budgetary outcome indicators

Indicator		Budgetary Outcome Indicators (N = 13)			
		Health budget / total district budget		Health expenditures /authorized budget	
		Corr	*p-value*	Corr	*p-value*
Decision Space	FM	0.21	0.50	0.34	0.26
	HR	0.61	0.78	-0.32	***0.09***
	S&OP	0.23	***0.03***	0.14	0.29
	SO	0.37	0.82	-0.10	***0.08***
Capacity	FM	0.09	0.44	0.48	0.66
	HR	-0.07	0.72	0.50	0.68
	S&OP	-0.11	0.21	-0.13	0.74
	SO	-0.12	0.70	0.07	0.82
	G&LP	0.25	0.40	-0.14	0.65
Accountability	G&LP	0.37	0.22	-0.29	0.33
	G&LP/HR	0.37	0.22	-0.29	0.33

Table 22: Mean district-level decision space/capacity/accountability (DCO, Nazim, EDOH, EDOFP respondents only) and health services outcome indicators

Indicator		Health Services Outcome Indicators (N = 18)							
		% SBA-assisted births*		% women with ANC during pregnancy*		% women with 2+ doses of TT		Composite MCH indicator	
		Corr	*p-value*	Corr	*p-value*	Corr	*p-value*	Corr	*p-value*
Decision Space	FM	0.46	***0.09***	0.54	***0.04***	0.36	0.14	0.54	***0.02***
	HR	0.68	0.42	0.56	0.25	0.33	0.23	0.50	0.37
	S&OP	0.37	***<0.01***	0.44	***0.03***	0.26	0.19	0.33	***0.03***
	SO	0.20	0.54	0.43	0.34	0.38	0.34	0.39	0.44
Capacity	FM	0.23	0.17	0.32	0.10	0.30	0.29	0.23	0.18
	HR	0.17	0.98	0.27	0.30	0.24	0.32	0.19	0.42
	S&OP	0.01	0.47	0.29	0.11	0.25	0.12	0.20	0.11
	SO	0.17	0.54	0.36	0.18	0.42	***0.08***	0.37	0.13
	G&LP	0.58	***0.02***	0.75	***<0.01***	0.53	***0.02***	0.59	***<0.01***
Accountability	G&LP	0.06	0.83	0.35	0.20	0.55	***0.02***	0.41	***0.09***
	G&LP/HR	0.14	0.61	0.40	0.14	0.38	0.12	0.42	***0.08***

Table 23: Mean district-level decision space/capacity/accountability (DOH, MS DHQ, MS THQ respondents only) and health services outcome indicators

Indicator		Health Services Outcome Indicators (N = 18)							
		% SBA-assisted births*		% women with ANC during pregnancy*		% women with 2+ doses of TT		Composite MCH indicator	
		Corr	*p-value*	Corr	*p-value*	Corr	*p-value*	Corr	*p-value*
Decision Space	FM	0.53	***0.04***	0.68	***<0.01***	0.54	***0.02***	0.59	***0.01***
	HR	0.07	0.20	0.19	***0.02***	0.18	***<0.01***	0.21	***0.03***
	S&OP	0.44	0.79	0.64	0.50	0.43	0.48	0.52	0.40
	SO	0.29	***0.09***	0.47	0.10	0.48	***0.09***	0.49	***0.06***
Capacity	FM	0.35	***0.10***	0.60	***0.01***	0.63	***0.08***	0.50	***0.03***
	HR	0.45	0.13	0.44	***0.08***	0.41	0.13	0.46	***0.07***
	S&OP	0.41	0.30	0.46	***0.08***	0.37	***0.04***	0.43	***0.04***
	SO	0.31	0.26	0.43	0.11	0.46	***0.06***	0.47	***0.05***
	G&LP	0.21	0.46	0.22	0.43	0.42	***0.08***	0.25	0.32
Accountability	G&LP	0.06	0.83	0.26	0.35	0.15	0.57	0.28	0.25
	G&LP/HR	0.06	0.83	0.26	0.35	0.15	0.57	0.28	0.25

ANNEX II: DISTRICT-BY-DISTRICT ANALYSIS

PAIMAN Intervention Districts

DG Khan

	Indicator	Table	Finding	Recommendation
Decentralization	Decision Space	1	Above-average for all but HR	Advocate more choice in HR
	Capacity	2	Below-average for HR and G&LP	Capacity-building in HR and G&LP
	Accountability	3	Below-average for G&LP	Incorporate accountability into capacity-building
	Above-average capacity	8	Below-average for SO, S&OP, G&LP	Capacity-building in SO, S&OP, G&LP for all staff
Outcomes	HR management	12	Below-average for all staff, LHV and THQ hospital	Capacity-building in HR
	Budget management	13	Below-average for % health in district budget	Advocacy with senior officials to increase health budget
	Service delivery	14	Below-average for RHC, SBA and ANC2	Specific PAIMAN advocacy and training
Summary	▪ Need **special initiatives in HR and accountability**: develop a specific capacity-building program with more emphasis on HR and G&LP, incorporating more attention to accountability and participation and advice that can make more independent choices in HR ▪ Advocacy program for senior officials to **increase health budget** ▪ Link special initiatives and/or target **PAIMAN training especially for RHC, SBA and ANC**			

Khanewal

	Indicator	Table	Finding	Recommendation
Decentralization	Decision Space	1	Below-average for HR and S&OP	Advocate more choice in HR and S&OP
	Capacity	2	Below-average for FM and S&OP	More capacity-building for FM and S&OP
	Accountability	3	Below-average for G&LP/HR	Incorporate accountability into HR capacity-building
	Above-average capacity	8	Below-average for FM and S&OP	Capacity-building in FM and S&OP
Outcomes	HR management	12	Above-average in all	None
	Budget management	13	At average	None
	Service delivery	14	Below-average in all	Specific PAIMAN advocacy and training
Summary	▪ Need **special initiatives in S&OP and FM**: emphasize decision space and capacity for S&OP, capacity for FM ▪ Incorporate more **attention to accountability and participation into HR** ▪ Link special initiatives and/or target **PAIMAN training for all health services**			

Rawalpindi

	Indicator	Table	Finding	Recommendation
Decentralization	Decision Space	1	Below-average for SO	Advocate more choice in SO
	Capacity	2	Below-average for FM and S&OP	Capacity-building in FM and S&OP
	Accountability	3	Above-average	None
	Above-average capacity	8	Above-average for all	None
Outcomes	HR management	12	Below-average for all staff and DHQ hospital	Capacity-building in HR
	Budget management	13	Below-average for % health in district budget	Advocacy with senior officials to increase health budget
	Service delivery	14	Above-average for all	None
Summary	▪ Need **capacity-building initiatives in S&OP and FM, and HR** ▪ Advocacy program for senior officials to **increase health budget**			

Jhelum

	Indicator	Table	Finding	Recommendation
Decentralization	Decision Space	1	Above-average for all	None
	Capacity	2	Above- or at-average for all	None
	Accountability	3	Above-average	None
	Above-average capacity	8	Above-average for all	None
Outcomes	HR management	12	Below-average for WMO	None
	Budget management	13	Above- or at-average	None
	Service delivery	14	Above-average	None
Summary	▪ As **one of the best-performing districts**, there are no specific recommendations for decentralization at this time ▪ Consider **using Jhelum's experience to inform capacity-building and in other districts** (e.g., review of Jhelum's implementation of decentralization; organized visits by officials from other districts to Jhelum)			

Sukkur

	Indicator	Table	Finding	Recommendation
Decentralization	Decision Space	1	Above- or at-average for all	None
	Capacity	2	Above- or at-average for all	None
	Accountability	3	Above-average	None
	Above-average capacity	8	Below-average for HR and G&LP	Capacity-building in HR and G&LP
Outcomes	HR management	12	Below-average for all staff, LHV	Capacity-building in HR
	Budget management	13	Below-average for both	Advocacy with senior officials to increase health budget; capacity-building with health administrators to increase expenditure rate
	Service delivery	14	Below-average for RHC, THQ and ANC1	Specific PAIMAN advocacy and training
Summary	▪ Need special **capacity initiatives in HR**: develop a specific capacity-building program emphasizing HR and G&LP that complements relatively wide decision space in both functions ▪ **Improve budgetary management at all levels**, including advocacy program for senior officials to increase health budget and capacity-building with health administrators to improve expenditure rate ▪ Link special initiatives and/or target **PAIMAN training especially for RHC, THQ and ANC**			

Dadu

	Indicator	Table	Finding	Recommendation
Decentralization	Decision Space	1	Below-average for FM, S&OP and SO	Advocate more choice in FM, S&OP and SO
	Capacity	2	Below-average for all but SO	Capacity-building in FM, HR, S&OP and G&LP
	Accountability	3	Above-average	None
	Above-average capacity	8	Below-average for FM, HR, and G&LP	Capacity-building in FM, HR, and G&LP
Outcomes	HR management	12	Below-average for all but WMO	Capacity-building in HR
	Budget management	13	Below-average for health expenditures	Capacity-building with health administrators to increase expenditure rate
	Service delivery	14	At- (or slightly below) average for all	None
Summary	▪ Need special **initiatives in HR and FM**: develop program emphasizing capacity-building in FM and HR, with concurrent attention to widening decision space in HR to ensure ability to make independent choices ▪ **Link special initiatives to improvements in financial and budgetary management**, including capacity-building with health administrators to improve expenditure rate			

Upper Dir

	Indicator	Table	Finding	Recommendation
Decentralization	Decision Space	1	Below-average for HR and SO	Advocate more choice in HR and SO
	Capacity	2	Below-average for S&OP, SO and G&LP	Capacity-building in S&OP, SO and G&LP
	Accountability	3	Above-average	None
	Above-average capacity	8	Below-average for S&OP, SO and G&LP	Capacity-building in S&OP, SO and G&LP
Outcomes	HR management	12	Below-average in LHV and DHQ	Monitor future HR performance
	Budget management	13	N/A	N/A
	Service delivery	14	Below-average for all	Comprehensive PAIMAN advocacy and training
Summary	▪ Need special **initiatives in S&OP and SO**: develop program emphasizing capacity-building in S&OP and SO, with concurrent attention to widening decision space in SO to ensure ability to make independent choices ▪ **Link special initiatives to improvements in all aspects of service delivery**			

Buner

	Indicator	Table	Finding	Recommendation
Decentralization	Decision Space	1	Below-average for FM, S&OP and SO	Advocate more choice in FM, S&OP and SO
	Capacity	2	Below-average for all but FM	Capacity-building in HR, S&OP, SO and G&LP
	Accountability	3	Below-average	Incorporate accountability into capacity-building
	Above-average capacity	8	Below-average for all but FM	Capacity-building in HR, S&OP, SO and G&LP
Outcomes	HR management	12	Below-average in WMO and THQ	Monitor future HR performance
	Budget management	13	Below-average for % health in district budget	Advocacy with senior officials to increase health budget
	Service delivery	14	Below- or at-average for all	Comprehensive PAIMAN advocacy and training
Summary	▪ Need special **initiatives in HR, S&OP, SO, and accountability**: develop program emphasizing capacity-building in HR, S&OP, SO and accountability, with concurrent attention to widening decision space in the same functions to ensure ability to make independent choices ▪ Advocacy program for senior officials to **increase health budget** ▪ Link special initiatives and/or target **PAIMAN training to improvements in all aspects of service delivery**			

Lasbella

	Indicator	Table	Finding	Recommendation
Decentralization	Decision Space	1	Below-average for all	Advocate more choice in FM, HR, S&OP and SO
	Capacity	2	Below-average for all but G&LP	Capacity-building in FM, HR, S&OP, and SO
	Accountability	3	Below-average for G&LP/HR	Incorporate accountability into HR capacity-building
	Above-average capacity	8	Below-average for all but S&OP	Capacity-building in FM, HR, SO and G&LP
Outcomes	HR management	12	Below-average for LHV, DHQ and THQ	Capacity-building in HR
	Budget management	13	Below-average for health expenditures	Capacity-building with health administrators to increase expenditure rate
	Service delivery	14	Below-average for SBA, ANC1 and ANC2	Specific PAIMAN advocacy and training
Summary	▪ Need special **initiatives in all areas**: develop program emphasizing capacity-building in FM, HR, S&OP, SO, incorporating accountability into HR capacity-building and ensuring that increased capacity is matched with widened decision space to ensure space to make independent choices ▪ **Improve budgetary management lower levels**, including capacity-building with health administrators to improve expenditure rate ▪ Link special initiatives and/or target **PAIMAN training especially for SBA and ANC**			

Jafferabad

	Indicator	Table	Finding	Recommendation
Decentralization	Decision Space	1	Below-average for all	Advocate more choice in FM, HR, S&OP and SO
	Capacity	2	Below-average for FM, SO and G&LP	Capacity-building in FM, SO and G&LP
	Accountability	3	Below-average	Incorporate accountability into capacity-building
	Above-average capacity	8	Below-average for SO and G&LP	Capacity-building in SO and G&LP
Outcomes	HR management	12	Below-average for WMO, DHQ and THQ	Capacity-building in HR
	Budget management	13	N/A	N/A
	Service delivery	14	Below-average for all but RHC	Comprehensive PAIMAN advocacy and training
Summary	▪ Need special initiatives in **HR, FM, SO and G&LP**: develop program emphasizing capacity-building in HR, FM, SO, and G&LP, incorporating accountability and ensuring that increased capacity is matched with widened decision space to ensure space to make independent choices ▪ **Improve budgetary management lower levels**, including capacity-building with health administrators to improve expenditure rate ▪ Link special initiatives and/or target **PAIMAN training to improvements in all aspects of service delivery**			

GTZ Intervention Districts

Nowshera

	Indicator	Table	Finding	Recommendation
Decentralization	Decision Space	1	Below-average for FM and SO	Advocate more choice in FM and SO
	Capacity	2	Below-average for FM and G&LP	More capacity-building for FM and G&LP
	Accountability	3	Below-average for G&LP/HR	Incorporate accountability into HR capacity-building
	Above-average capacity	8	Below-average for FM, HR and G&LP	Capacity-building in FM and G&LP
Outcomes	HR management	12	Below-average for WMO	Attention to capacity-building in HR
	Budget management	13	Below-average for % health in district budget	Advocacy with senior officials to increase health budget
	Service delivery	14	Above-average in all	None
Recommendations	▪ Need **capacity-building in FM and G&LP** ▪ **Advocacy with senior officials** to increase decision space in FM and health budget			

Mardan

	Indicator	Table	Finding	Recommendation
Decentralization	Decision Space	1	Below-average for SO	Advocate more choice in SO
	Capacity	2	Below-average for S&OP and SO	More capacity-building for S&OP and SO
	Accountability	3	Above-average	None
	Above-average capacity	8	Below-average for S&OP, SO and G&LP	Capacity-building in S&OP, SO and G&LP
Outcomes	HR management	12	Below-average for WMO	Attention to capacity-building in HR
	Budget management	13	Below-average for % health in district budget	Advocacy with senior officials to increase health budget
	Service delivery	14	Above-/at-average in all	None
Recommendations	▪ Need **capacity-building in SO and S&OP** ▪ **Advocacy with senior officials** to increase decision space in SO and health budget			

ANNEX III: SAMPLE QUESTIONNAIRE

Pakistan "Decision Space" and Capacities Questionnaire For EDO-Health

Initiative and objectives of PAIMAN

The Pakistan Initiative for Mothers and Newborn Health (PAIMAN) is a five-year project funded by the United State Agency for International Development (USAID). PAIMAN is committed to assist the Government of Pakistan to implement essential and effective interventions to improve the service delivery to ensure better health status of mothers and newborns. A consortium led by JSI is responsible for designing and implementing the project. Other members of consortium include AKU, Contech International Health Consultants, Greenstar, John Hopkins University Centre for Communication Program, PAVHNA, Population council and Save the Children USA. Main objective of the project is to reduce maternal, neonatal morbidity and mortality in the selected districts of the country. One of the project components is to improve service delivery through improved planning and management. Initially the project is being implemented in 10 districts of the country i.e. Rawalpindi, Jhelum, Khanewal & DG Khan in Punjab; Upper Dir and Buner in NWFP; Jaffarabad and Lasbella in Balochistan; Sukkur and Dadu in Sindh.

As you know since 14th August 2001, under the devolution many structural and functional changes were made in administrative/governance system in Pakistan. The motives behind the devolution were to decentralize the financial and functional authorities to provide opportunity for district based decisions in every sector including health. The devolved system was intended to provide the choices to the districts for utilization of allocated budgets according to their needs and to exercise the managerial authority over human resources to improve the efficiency of the services through community participation. At this point of time there is a critical phase of devolution, where the districts are struggling for the choices and capacities that they must have to improve the efficiency of various services especially in the health sector.

One of the PAIMAN objectives is strengthening of District Health System and this study will focus on assessment of the existing decision space that lies with the various district health authorities over finances, human resources, services organization and District Planning & Management. After the initial assessment some measures will be suggested to strengthen the district health management system that will help to improve efficiency and quality of the health services. This study will provide the bench-marks for the current choices of district health authorities over financial and human resources, services organization, governance and local participation. It will also explore what capacities have to be built and what constraints have to be removed to support the decision choices. It is hoped that findings of the study will help to improve the district health system under the prevailing circumstances.

The collected information will be kept confidential and this will only be utilized for need assessment and designing intervention packages for improvement in the health system. It will take about 45-60 minutes to complete the interview.

Individual Characteristics

1. Name:_____ (to be converted into a number to preserve anonymity)
2. District:_____ (to be converted into a number to preserve anonymity)
3. Date:_____
4. Years in Government Service_____

5. Professional University Training -- list degrees and specialties_____
   _____
   _____

6. Any additional management (HR, logistics, etc) training of two weeks or more-- overseas courses, evening courses, etc.

   Course Name Duration In the last year 2-5 years ago More than 5 years ago

   _____
   _____
   _____
   _____

7. Length of time have you worked in this district _____months

8. Length of time in current post _____months

9. Length of time in the same administrative positions (EDO or DHO) _____months

10. What Category of DDO are you? I___ II____

11. What BPS grade?____

Strategic and Operational Planning

12. What are the current five priorities in health services and promotion in your district?
    a. _____
    b. _____
    c. _____
    d. _____
    e. _____

13. Have you been trained (or received professional education) in strategic planning (vision, multiyear) (as opposed to operational planning) ?: Yes ___ or no ___

Comments (If any):_____

14. Have you been trained in operational (annual, activity based, implementation) planning? (district health planning, activity planning, specific program planning): Yes ___ No ___

    Comments (If any):_____

15. Do you have a District Strategic Health Plan? Yes___ no ___(please show it to us)
    a. If yes, did you participate actively in the design of a district strategic planning process?: Yes ___ No___

    Any comments:_____

16. Do you have a District Health Plan (annual)?: Yes __ No ___
    a. If yes, did you actively participate in the development of the District Health Plan?: Yes ___No___
    b. Did you get additional technical assistance from Province, national or donor project for district health plan?: Yes___ No___
    c. Did your planning exercise include review of the budget?: Yes__ No__

    Comments (If any):_____

17. If yes, to #15 and 16, are your current operational plans influenced by your district strategic plan (or Provincial Strategic Plan)?:
    a. No, we did not do a strategic plan and I am not aware of the Province Strategic plan ___
    b. no, the situation has changed so much that the strategic plans are no longer valid ___
    c. no, our operational plans are based primarily on what was done in the previous year ___
    d. yes, we have changed our operational plans to make them more closely aligned with the strategic plan ___
    e. yes, we have made some changes in operational plans but much of the operational planning is still based on what was done the previous year ___
    f. other (explain)_____

18. Do you do a mid year or end of year assessment of achievement of operational plan (District Health Plan) activities and objectives of district ___, and/or national (vertical)____ (check all that apply)?
    a. yes, we do a mid year and/or end of year assessment of planned achievements ___
    b. no, we never do assessments ___
    c. no, our assessments are not based on reviewing planned achievements ___

d. we only monitor these programs and activities_____
e. other (explain)

_____

19. In the process of developing PC1, are you able to establish local priorities (different from Provincial and National priorities)? For example if you want to budget more for a hospital or emergency services which have not been provincial or national priorities can you put them in the PC1?
Yes___ No___ Sometimes____ Never tried_____

20. Did representatives of other sectors participate in formulating your District Health Plan?: Yes__ No___ Have you included the activities of other sectors in your District Health Plan?: Yes___ No___

Comments (If any):_____

Decision Space in Financial Management

21. Do you have the Provincial Financial Rules and Budget Rules manuals?: Yes, both ___ Yes, only one___ No ___ If yes, have these manuals been useful for managing your finances? Yes ___ No ____ Sometimes _____
Any comments:_____

User Charges and Taxes

22. Do you decide how much to charge for different services or is this decision made at the province level? District decision___ Province Decision___

Any comments:_____

23. Can you retain your user charges at district level? Yes___ No ___

24. Have you initiated a health tax? Yes___ No ___

Any comments:_____

Budgeting Process

25. In the budget process do you develop your own criteria for assigning budgets or follow the provincial instructions (e.g. number of beds, yardsticks)? Own criteria_____
Provincial instructions ____

26. In the budget process, what criteria do you (or your staff) most often use for non-salary budget allocations to different facilities:
a. historical budget plus increases (or minus decreases) ____
b. changes in the number of services provided _____

c. detailed analysis of variations in disease patterns based on epidemiological data ____
d. allocate more to poorer areas or to rural areas ____
e. no uniform criteria has been established, we decide on the basis of each case and use different criteria for each case ____
f. other (explain) _____

27. In preparing the budget who else works with you to make the decisions about allocations:
    a. I decide the allocations myself ___ _
    b. I simply consolidate the facilities budget ____
    c. I decide the allocations myself, because the facilities are not capable of preparing their budgets ___
    d. I consult with MS, I/C, DOH ___
    e. I hold a workshop with DHMT to make the decision ____
    f. Other_____

28. After you presented your budget <u>last year</u> to the EDO(F&P), what happened?:
    a. Your proposal was simply consolidated and not changed ____
    b. Your proposal was reduced after discussion with you ____
    c. Your proposal was reduced without explanation ____
    d. Other_____

29. Have you attempted to get your budget approved (as presented)?: Yes___ No ___
    a. If yes, how did you?
        i. Meeting with other EDOs ____
        ii. Meeting with DCO ____
        iii. Meeting with Nazim ___
        iv. Meeting with members of District Assembly ___
        v. Personal contacts with _____?
        vi. Others_____

30. Once you got your approved budget <u>last year</u>, how did you make reappropriations?
    a. I did not make any reappropriations ___
    b. Only made minor reappropriations that did not need additional approvals ___
    c. I requested reappropriations that required DCO approval ____
        i. DCO approved without modification ____
        ii. DCO did not approve ____
        iii. DCO modified my proposed reappropriations ____

31. Did you attain a "Supplementary Grant" last year?: Yes___ No ___
    a. Explain_____
32. Did the provincial [or district] government <u>last year</u> provide you with sufficient guidelines and training to do your budget planning and to manage your finances?: Yes____ No___

Explain what kind of guidelines and training exists or are needed:

_____

33. Once you have your budget, what criteria do you (or your staff) most often use to allocate the (non-salary) budget (such as, for drugs or other supplies) to the different facilities:
    a. historical budget plus increases (or minus decreases) ____
    b. changes in the number of services provided _____
    c. detailed analysis of variations in disease patterns based on epidemiological data ____
    d. allocate more to poorer areas or to rural areas ____
    e. no uniform criteria has been established, we decide on the basis of each case and use different criteria for each case ____
    f. other (explain)_____

34. Do you have sufficient staff with appropriate training to manage your budgets?

    a. Do you have sufficient postings for accountants?: Yes___ No___
    b. Do you have vacant posts in accountant posts?: Yes___ No ___
        i. How many___ How long____
    c. Do you have sufficient postings for accounts/assistants clerks?: Yes__ No___
    d. Do you have vacant posts in accounts/assistants clerks?: Yes___ No__
    e. Have your management staff (DDOs) been sufficiently trained in managing budgets?: Yes__ No___

    Any comments:_____

35. What specific training would be useful for you to overcome some financial management problems that you have had?
    a. None __
    b. Accounting___
    c. Financial Management___
    d. Budget rules___
    e. Planning___
    f. Other___

    Any comments:_____

36. If you were given more authority to make more choice over expenditures and revenues, would you need more or different kinds of, staff? If so what kinds of staff_____

    Comments (If any):_____

Other sources of financial support

37. Did your district receive donations from other organizations in 2005 ?

Individual Donations _____ How much in rupees (rough estimate)_____
Local NGOs_____ How much in rupees _____
International NGOs____ How much in rupees_____
Others_____How much in rupees _____

Any comments:_____

38. What activities (MCH, FP, HIV/AIDS, TB, Hospital equipment and construction, others) were funded by these sources?

_____
_____

39. Who made the decisions on how the funds were used ?
    a. I decide the allocations myself ____
    b. I consult with MS, I/C, DOH, ____
    c. I hold a workshop with DHMT to make the decision ____
    d. Other_____

Comments:

40. Do you participate in decisions about donor project funding? Yes___ No ___
    a. Explain what you

       do_____

    Any comments

    _____

Human Resources

41. Can you hire (contract), promote, substitute, transfer, discipline and fire staff for which you have sanctioned positions?: Yes___ No___
    a. if yes, up to what grade?_____
    b. if yes, in the last year, roughly how many staff have you: [READ Options]
        i. hired_____
        ii. promoted_____
        iii. substituted_____
        iv. transferred_____
        v. disciplinary actions_____
        vi. fired_____

    Any comments:_____

42. Have you proposed hiring, promote, substitute, transfer or disciplinary action for staff above your authority to District Government?: Yes___ No__
    a. If yes, were your proposals approved?: In most cases____ few cases ___ never____

b. If your proposals were not approved in general, why were they not approved?
    1. No reason was given
    2. Do you think you had not given sufficient justification/information
    3. Do you think the authority had personal or non-technical reasons for rejecting your proposal
    4. You did not initiate the decision -- the higher authority initiated the decisions
    5. What did the authority say were the reasons?_____

43. Do you have a District Selection Committee? Yes__ No__
    a. If yes, have you consulted this committee for the recruitment against vacant positions ?: Always___ Sometimes ___ Never___

Any comments:_____

44. Have you recommended the creation of new posts in the last year? Yes___ No___
If yes, were your proposals approved?: In most cases____ some times___ seldom ___ never____

45. How would you characterize your relationship with the DCO? [READ these options]
    a. We work well together and have no significant differences
    b. We work well together even though we have some differences
    c. We have differences but more often we agree
    d. We have differences and seldom agree
    e. We have serious differences that have made it difficult for me to do my job

Any comments:_____

46. How would you characterize your relationship with most of your DOH and MSs? [READ the options]
    a. We work well together without any clear disagreements
    b. We work well together even though we have some differences
    c. We have differences and seldom agree
    d. We have serious differences that have made it difficult for me to do my job
    e. Other_____

47. What methods do you use for performance evaluation of senior staff (Annual Confidential Reports):
    a. Supervisory visits: Often ___ seldom ___ never ____
    b. Progress reports of facilities: Often ___ seldom ___ never ___
    c. Individual interviews with staff: Often ___ seldom ___ never ___
    d. Agreed objectives: Often ___ seldom ___ never ___
    e. Personal observation: Often ___ seldom ___ never ___

48. Can you give rewards to staff for good performance? Yes___ No___
    a. If yes, what kinds of rewards (incentives) you can give for good performance:
        i. Verbal recognition: Frequently____ Sometimes____ Never

ii. Letter of appreciation: Frequently _____ Sometimes ____ Never ____
iii. Transfer to more desirable post: Frequently _____ Sometimes ____ Never ____
iv. Salary increments: Frequently _____ Sometimes ____ Never ____
v. Staff development/training: Frequently _____ Sometimes ____ Never ____
vi. Other_____

49. In the last year, in general who initiated these staffing changes? [READ the options]
    a. the community representatives or political leaders: Often____Seldom __ Never___
    b. supervisor or other department of health staff: Often____Seldom___ Never___
    c. for transfers or resignations, the staff in question: Often____Seldom__ Never___
    d. other_____

50. In the last year, in general how often did you consult the DOH, MS, DDOH of the staff in question for personnel decisions?: Always_____ Sometimes ____ Never____

51. Estimate the amount of time you spend on human resources management issues? _____ % of your working week

    Any comments:_____

52. Do you have a problem of absenteeism in health facilities? Yes___ No___
    If yes, what can you do about it?
    a. Nothing ___
    b. discipline staff in question___
    c. provide incentives to reward attendance__
    d. involve the community in certifying attendance___
    e. transfer to convenient posting____
    f. improve housing conditions____
    g. other_____

53. During the last year have your supervisors reported problems to you about services they are supervising?
    If yes, what did you do to solve these problems? [READ the options]
    a. verify the problem from other sources: Always___ Sometimes __ Never___
    b. visit the facility: Always___ Sometimes __ Never___
    c. call the In Charge of facility to discuss problem: Always___ Sometimes __ Never___
    d. take disciplinary action: Always___ Sometimes __ Never___
    e. take other corrective action: Always___ Sometimes __ Never___
    f. ask for assistance from Province: Always___ Sometimes __ Never___

54. How often do you go on regular supervisory visits per month?____

55. How often do you have regular meetings of Facility In-Charges?: weekly_____ monthly___ quarterly__
Other_____

56. Do you have a DHMT?: Yes___ No___
    a. if yes, how often do you normally hold DHMT meetings over the last year (verified by minutes)?
        i. Monthly___ quarterly___ semi-annually___ other____
    b. if yes, who attends during the last year? [READ the options]
        i. DCO?: Always___ Sometimes __ Never___
        ii. EDO/F&P: Always___ Sometimes __ Never___
        iii. EDO/Education: Always___ Sometimes __ Never___
        iv. EDO/Community Development: Always___ Sometimes __ Never___
        v. District Population Officer: Always___ Sometimes __ Never___
        vi. DOH/DDOH: Always___ Sometimes __ Never___
        vii. MS: Always___ Sometimes __ Never___
        viii. Nazim Representatives: Always___ Sometimes __ Never___
        ix. NGO representatives: Always___ Sometimes __ Never___
        x. Others_____

57. Does your staff (e.g. office superintendent) have the capacity to manage human resources administration of the health staff in the district? Yes___ No___ If not, what training or capacities do they need?_____

58. Do you have Rules of Business for District Governments (Local Governance Ordinance)? Yes___ No ___ Has this manual helped you in making human resources decisions? Yes _____ No ____ Sometimes ____

Any comments:_____

59. Are you aware of a provincial policy/guidance on contracting?: Yes___ No ____

60. Have you had training or experience in preparing contracts for hiring individual staff?: Yes___ No___

61. Have you had difficulties with contracts for hiring individual staff?: Yes___ No___
    a. If yes, explain the problems_____

62. Does the District Health Development Center (if available) have a Human Resource Development Plan?: Yes__ No__

Any comments:_____

63. Have you requested a special training program for identified needs in the last year?: Yes__ No___
    a. Was it conducted? Yes___ No___

64. Do you select/nominate the participants in the training programs?
    a. DHDC: Always___ Sometimes __ Never___
    b. PHDC: Always___ Sometimes __ Never___
    c. Donor sponsored workshops/trainings: Always___ Sometimes __ Never___
    d. International trainings: Always___ Sometimes __ Never___
    e. Who else selects/nominate participants?
        i. Donors: Always___ Sometimes __ Never___
        ii. Province: Always___ Sometimes __ Never___
        iii. Others_____

65. During the last year, how often have you met with representatives of professional associations about human resources management issues?: Never____ seldom ____weekly_____ monthly___ quarterly___ other____

Any comments:_____

66. What were the major topics of discussion with the associations?
    a. transfer of personnel in the province ____
    b. schedules, rotations, and vacations ____
    c. occupational health issues ____
    d. complaints about working conditions in facilities ____
    e. others (explain)
        _____

67. Were you able to solve the problems with associations without requesting intervention by the Province or national MOH?
    a. I have always solved them at district level___
    b. Only in rare cases have I had to ask for provincial or national assistance___
    c. I often have had to ask for provincial or national assistance because the issues were beyond my capacity to solve___
    d. Other (explain)
        _____

Any comments:_____

Service Organization

68. During the last year, to modify national and provincial programs to your own needs have you been able to:
    Shift budgets to purchase more supplies: Yes___No ___
    Reallocate staff (temporarily) to different assignments: Yes___No____

69. During 2005 did you (and your district staff) initiate any new programs or new ways of providing services that were not already in existence or ordered by Provincial Health Department or MOH program managers? Yes___No___
    If yes, please describe the new program or new organization
    _____

70. If you disagree with the Provincial Department of Health or MOH program managers' priorities (such as, required activities such as vaccinations, malaria, tuberculosis, family planning, HIV/AIDS), what do you do?
    a. there is nothing I can do other than implement what they require___
    b. I sometimes take up the case with the Program Managers and try to change their minds___
    c. I sometimes ignore their orders___
    d. I sometimes do only part of what they require___
    e. I add my priorities to the required activities____
    f. Other (explain)
    _____

71. How often do you and your district staff receive directives, memos and telephoned instructions from the central administration and Directors for priority programs?
    a. Frequently (once a week)____
    b. Moderately (once a month)_____
    c. From time to time (once every 3 months)____
    d. Seldom or Never_____
    Any comments:_____

72. What effect do these directives have on your planned activities?
    a. cause major changes in plans____
    b. cause moderate changes in plans___
    c. cause only minor changes in plans___
    d. don't really require changes in plans___

73. Are the directives reasonable and do they help solve problems? Yes____ No____ If yes,
    explain_____

74. Does the current information system [HMIS, Monthly Expenditure Report, other reports]provide you the kind of information that you need for making "evidence based decisions"? Provides most of the information___ some of the information __ very little of the information I need____

75. During the last year, were you able to make planning decisions using the information on diseases, utilization of facilities in the District Health Plan? This information was used: extensively____ sometimes ___ seldom ___ never

76. During the last year, were you able to make budgeting decisions using the information on human resources, expenditures, and utilization? This information was used: extensively____ sometimes ___ seldom ___ never

    Any comments:_____

77. Do you (or Store In Charge) forecast your drug and supply needs?: Yes___ No___

78. Have you (or Store In Charge) been trained in forecasting your drug and supply needs?: Yes___ No___

79. Have you changed the Essential Drug List for the District this year?: Yes ___ No___

80. How many drugs are on this list?____

81. Do you have a District Procurement Committee to procure/purchase your drug and supply needs?: Yes___ No___

    Any comments:_____

82. Have you been trained in procurement your drug and supply needs?: Yes____ No_____

83. What do you do when a stock out is reported to you?
    a. Nothing___
    b. shift drugs from facilities with surplus: sometimes___ never___
    c. use reserve stocks: sometimes ___ never___
    d. small purchase: sometimes ___ never ___
    e. reinitiate procurement process: sometimes ___ never___

84. How do you allocate drugs and supplies to the facilities in the district?
    a. According to historical distribution.___
    b. same amounts to each center___
    c. according to a forecasting process for each facility___
    d. other
       (explain)_____

85. In the past year, have you been able to assign budgets for repair and maintenance to your own priorities? Yes__ No___
    Any
    comments:_____

86. When you have insufficient budget for repair/maintenance of high cost equipment/vehicles, did you:
    a. Request a supplementary grant___
    b. Reallocate funds from other headings___
    c. Defer to next year budget___
    d. Donor support or other donations___
    e. Nothing___

87. In the past year, have you needed to purchase new ambulances for your health facilities?: Yes__ No__
    a. If yes, were you able to purchase from your: annual budget?___ development budget ___ donors ___ other___

88. Have you initiated public/private partnership to improve access, quality and/or efficiency of health services in your district?: Yes__ No__
    a. If yes, describe the initiative?_____
    _____
    b. Has the initiative achieved your objectives?: Fully___ in large part____ some____ very little___

89. Have you prepared a contract with private sector providers? If so, have you had any problems with the contracts?
    Explain_____

90. Have you had training in contracting for public/private partnership?:
    Yes___No____

Any comments:_____

Governance and local participation

91. How often do you have meetings (or other contacts) with the Nazim? daily___ weekly____ monthly____
    a. On what subjects /activities ?_____

92. Is health a priority for your Nazim?: Yes__ No___
    If not, what other sector(s) is a high priority?_____

93. Has the District Government supported any special new health activities in the last two years?: Yes__ No__
    a. If yes, what types of initiatives have they supported?_____
94. Do the CCBs in your district have a health specific project?: Yes___ No___
    a. If yes, do you coordinate/meet with them?: Yes___ No___
    b. If yes, how often?: daily___ weekly____ monthly____

Any comments:_____

95. In the last year, did you have information dissemination or advocacy meetings about health needs:
    a. with Nazim: Often____ seldom___ never____
    b. members of district assembly: Often____ seldom___ never____
    c. the public: Often____ seldom___ never____
    d. potential donors and/or charities: Often____ seldom___ never____

Any comments:_____

96. Do you feel comfortable working with politicians?: Most of the time___ Sometimes___ Rarely___
    a. Would you like to have some training on working well with politicians?: Yes__ Not necessary___

Any comments:_____

97. Have you supported the establishment of new NGOs?: Yes___ No___

98. Have you implemented activities to improve the capacities of NGOs?: Yes___ No__

99. Do you coordinate with local NGOs on health activities?: Yes___ No___
    a. How often ?: daily___ weekly____ monthly____
    b. On what subjects/activities ?_____

Any comments:_____

100. Is there some mechanisms of intersectoral coordination in your district?: Yes___No____
If you have meetings, how often do you meet?:_____ What other officials attend these meetings?:
_____

101. Are there priorities for better or new services that a number of people in the community have requested but that <u>have not yet become</u> priorities of the DCO and/or elected officials? Yes____ No_____
If yes, what are these priorities_____

Any comments:_____

Priorities for Future Decision Space

102. Which of the following functions would be the most important, in your view, to have more choice about?. List in order of importance 1 being the most important and 8 being the least important:
    a. ____increase the amount of reappropriations of the budget you are allowed to make without higher approval
    b. ____ability to plan and budget with more flexibility
    c. ____ability to initiate a larger program in the development budget

d. ____ability to select senior staff in the district office
e. ____ability to hire and fire all staff in the district
f. ____ability to set district priorities that override central MOH priorities for service organization
g. ____ability to initiate more public/private partnerships
h. ____ability to generate your own funds through user charges and other mechanisms

QUESTIONS ABOUT PRE-DEVOLUTION

Note: These questions are for respondents who had similar management positions before and after devolution (around 2001).

103. What position did you have?_____
104. Did you have more, less or the same decision making authority after devolution:
Planning: More____ Less____ Same_____
Budgeting: More____ Less____ Same_____
Expenditures: More____ Less____ Same_____
Human Resources: More____ Less____ Same_____
Service Delivery: More____ Less____ Same_____
Governance and Participation: More____ Less____ Same_____

105. If you have less, who was given that authority?
_____

Any comments:_____

For interviewers only:

1. Was the interviewee:
   a. Cooperative_____
   b. Interested_____
   c. Uninterested _____
   d. Off-hand in responding____
2. Did the interviewer feel that he /she was getting thoughtful and realistic responses:
Yes___No___

3. Were there some issues raised that were not on the questionnaire?:

Give detail_____

Contech International
Health Consultants

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