Mobilising and Managing Knowledge Resources

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In running large-scale decentralised systems in knowledge intensive areas such as health, education, agriculture, water, and energy systems, it is the ability to synthesise tacit knowledge gained from practice in local contexts with more codified knowledge gained from training and technical support, into implementation processes, constant internal learning and renewal, and building institutional memory that makes a critical difference between success and failure

THE INSTITUTIONAL capacity to continuously access, mobilise, generate and manage knowledge resources to strengthen public systems and programmes – across sectors and on an ongoing basis – is a critical aspect of state capacity. Unfortunately, all too often, the approach to knowledge and its management within public systems has struggled to find a productive balance between being valourised (as 'expertise') and trivialised (as 'academic or theoretical'), externalised (as technical assistance) and routinised (as standardised and mandatory training days), over-emphasised (as reporting and record keeping) and unrecognised (as the 'tacit knowledge' and experience of local communities and field-level implementers.) In the process, we tend to arrive at a narrow understanding of poor programmatic outcomes and a limited view of the role of knowledge resources in transforming public systems and services.

In most cases, poor programmatic outcomes are perceived as implementation failures, with weak monitoring and enforcement held responsible as the major administrative lapse. And implementation failure is almost always equated with the failure to follow the scheme guidelines in a competent manner. This is both a narrow and largely misdirected understanding of the situation. In addition to serious gaps in financial and human resources, public systems and programmes suffer greatly from the inability to adequately and appropriately access the knowledge required for continuous capacity building and problem-solving at different levels. It is here that the budgetary allocations and the appointment of qualified staff, while necessary, are not sufficient. Knowledge must instead be recognised as a critical resource – on par with and distinct from financial and human resources. What is needed are well-defined and accountable institutional mechanisms designed to address the unique objectives, requirements and architecture of public systems and programmes to access and harness the knowledge essential for implementation.

Diverse Sources of Knowledge

The central challenge is to build an adaptive system – a vibrant, learning organisation, one that learns from communities, from academics, and from its own experiences in implementation and uses this learning to improve programme outcomes on a continuous basis.

It is vital to recognise all three sources of knowledge as important and

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complementary: people's knowledge; academic or professional domain knowledge and implementers' knowledge. Most often, it is the people's knowledge that is ignored in these programmes. Even in the cases where its importance is accepted, there are few mechanisms by which this knowledge can be mainstreamed into the decision-making process. Equally, public systems usually fail to recognise and learn from the knowledge of field workers and mid-level managers in the implementation chain. Just as local communities are most often seen as 'end beneficiaries' rather than active participants, frontline functionaries are usually seen only as persons who receive training and not as practitioners who have valuable knowledge, which should contribute to decision-making and systemic reform. Finally, the relationship with academic knowledge brings its own set of tensions. On one hand, the very different pace and presentation of rigorous academic research makes valuable knowledge out-of-sync and inaccessible to policymakers and implementers. On the other, there is an increasing emphasis on certain forms of 'evidence-based research' for policymaking and the adoption of research methodologies (especially experimental designs) in the evaluation of large-scale public programmes.

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All this tends to reproduce a series of problematic disjunctures, between technical expertise and implementation, between those who design policies and programmes and those who deliver and manage them, and between the dispensation of expert advice, modes of evaluation and the fixing of accountability for outcomes. A conducive and creative knowledge resource system should ideally bridge these gaps and put in place some well-designed institutional mechanisms that draws on diverse sources of knowledge in a cohesive and complementary way to strengthen public systems and the implementation of programmes on the ground. It should, therefore, be seen as a critical element in any agenda for administrative reform.

The rest of this article focuses on three key institutional mechanisms commonly used for accessing technical capacity and support, enabling systematic learning and developing institutional memory in public systems: (1) Resource Centres; (2) Knowledge Partnerships; (3) Internal Decision-Support Systems. For each, it presents some specific strategies and steps that may be taken to strengthen their design, management and performance. While it is of course, vital to take into account the requirements and unique features across diverse sectors and schemes, what follows is intended as a short thought-piece on some of the common design principles, which may be of value across systems and regions.

Enabling Dynamic Boundary Organisations

Resource centres can be productively thought of as boundary organisations – 'organisations designed to facilitate collaboration and information-flow between the research and public policy communities (Parker, John and Crona, Beatrice (2012) in *Social Studies of Science* 2012 42: 262) . But, in a critical extension of this definition, resource centres not only link research and policymaking, but are also dynamically embedded in systems of implementation. Here, they are *partly academic*, both in reviewing published literature and in commissioning and participating in implementation research and *partly operational*, as in formally sharing in the accountability for successful implementation of the programme. This is what gives resource centres their unique role and positioning. They are not designed to create a parallel system of implementation or to externalise technical or expert knowledge, but to dynamise public programmes and systems by generating and integrating knowledge that can be effectively deployed by implementors to improve the programmatic outcomes. Resource centres are accountable for successful implementation of the programme because they provide information to decision makers at all levels of the implementation cycle, from programme design, to drafting of guidelines and tools of programme implementation, building capacity in organisations charged with implementation, to monitoring programme implementation and identifying gaps and most importantly, interacting and learning from communities and field-level implementers and feeding knowledge from these sources into decision making.

Of course, resource centres are not a new idea in development programmes in India and have been a feature of the design and implementation of public programmes and systems across different states and sectors over many years. Unfortunately, very few such initiatives have been able to establish dynamic institutions that exemplify the special potential and role that resource centres can and must play as boundary organisations and vibrant centres of learning, transforming access to knowledge resources across public systems and programmes. The experience of establishing and running resource centres across different programmatic contexts suggests some of the key aspects that must be

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addressed for resource centres to work as an effective mechanism for accessing and generating knowledge required for programme implementation:

1. Resource centres need governance structures that ensure that they are the most responsive to the day-to-day priorities of implementers and planners. Any academic publications and the choice of research questions or studies towards primarily academic ends is secondary to the priority of delivering timely and high quality implementer support. If resource centres feel themselves accountable for programme results, instead of sitting on judgment of whether results have been achieved or even merely identifying programme gaps, the entire choice of questions and the nature of findings changes. Resource centres should not be defined by what they published or what studies they have conducted, but by how they helped in the uptake of appropriate knowledge from already available sources – in published literature, from the community of practitioners and most of all, from local people and communities – and the active use of this knowledge in decision making, leading to better programme outcomes.

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2. Resource centres are best set up as organisations with considerable functional autonomy to adopt the Human Resource policy most suited for their functions, for the construction of partnerships as needed and for building their own internal capacity and cumulative increases in institutional memory. Importantly, resource centres may be located within existing organisations or be newly created ones. The critical requirement is not necessarily for a new organisation but for an institutional architecture that can provide functional autonomy, internal leadership and strong governance. While, it is important to be responsive to the day-to-day priorities of implementers, there is also a need to assert a critical distance, so that resource centres do not get absorbed as extra hands for programme management. Both the overlaps and the distinction between programme management and knowledge management are vital. In this regard, it is essential for a resource centre to have a credible and dedicated Governing Board, which includes equal representation from implementers and from academia and civil society.
3. A key requirement is for the organisation and for individuals within the organisation, to be given sharply defined deliverables and outcomes, which form the basis of their appraisal and continuation. Finding the right leadership is very important, but, to the extent that one gets the internal organisational design right, has clarity on the role and powers of the Governing Board, and ensures that the creation of the organisation and the powers of the Board are well grounded with necessary approvals under government rules, so that the dependence on a larger-than-life individual leadership to overcome all the usual obstacles to perform can be reduced. One of the critical steps is to develop clarity on which the, tasks are allotted to the chief executive of the organisation and how he or she in turn allocates and reviews tasks delegated to individual consultants and partner institutions.
4. Finding the right human resources for such lean, high impact centres is important. The HR composition should be a good mix of those who come from academics and domain experts, who are also social activists (where relevant) and also from implementers. Community resource persons could be the most effective human resource of all and must be given the highest priority.
5. Finally, resource centers have typically only a small team in each of their areas of intervention and require partnerships to be effective. In any case, no single institution can build the capacity or mobilise all the knowledge needed for a complex public system or large-scale programme. More importantly, there are areas of specialisation where the domain knowledge has to be nurtured and grown within a setting where there are many persons working in that discipline, across multiple sectors. Just hiring a specialist from one of these disciplines and placing them within a sectoral organisation where there is likely to be only one or two more persons from that same discipline leads to loss of capacity, even in the specialist. Therefore, even where there are effective resource centers, partnerships are needed and conversely, partnerships are best harnessed where there are dynamic resource centers.

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Managing Diverse Knowledge Partnerships

An appropriate set of rules for managing knowledge partnerships is

urgently required. These rules need to be carefully designed to allow a range of partnerships to be formed, funded and reviewed. These must enable:

1. Transparent selection on a set of merit criteria that allows for local and multiple organisations to participate in the programme. This could include marks for being from the concerned locality and a ceiling for the number of districts or projects to be given to any one agency.
2. Appropriate contracting agreements, appraisal and renewal processes.
3. Grievance redressal mechanisms, especially required for smaller NGOs and consultancy organisations to appeal to, if there is any disregard of the terms of the contract by arbitrary administrative action.

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In many sectors, partners will require capacity building for themselves and governments must be ready to invest in these organisations. Wherever possible, a choice must be made to build capacity in local knowledge organisations so, that they can help the programme over the long-term. The following mechanisms may be considered for capacity building in knowledge partnerships, which would both substantially increase the value of these partnerships to programmes and to their network of partners:

a. Create and pay for faculty positions in educational and research institutions, so that the partner organisations grow and strengthen their commitment and human resource capacity to respond to programme needs.
b. Allow for implementers to teach and research through arrangements such as visiting faculty or fellowships, and for teachers and researchers to implement, by taking them on deputation into resource centers and even programme management units.
c. Allow for permeability of information across organisational boundaries, by having working groups and task forces for specific programmes, which involve and network these organisations.
d. Commission research projects and studies with partner organisations but with guidance from and in partnership with the implementers, so that they learn the problems of the day and have an understanding of already tried and tested solutions. A common problem with much of the academic input into policy and strategy is that they usually state what implementers already know, and have neither the tools, nor the frameworks needed to understand the constraints that implementers face, come up with much less innovative ways of overcoming these constraints. It helps to have resource centers act as bridges between the partner organisations and the implementers on a regular basis.
e. Commission some periodic tasks that are repeatedly and reliably carried out by the partner organisations – as an extension of the implementation unit. The tasks so outsourced should be chosen keeping in mind the specific nature of knowledge required. An example would be tracking state level public health expenditures and out-of-pocket expenditures annually or carrying out the national family health survey on a recurrent basis.

Designing Decentralized Decision Support Systems

While selected tasks may be commissioned out to partner organisations, all large-scale public programmes and systems require detailed information about how implementation is proceeding at the level of local units (village or facility) and at mid-level management units (block or districts) on a regular basis. This information is needed to take the appropriate management decisions and identify problems as early as possible, triggering corrective actions in problem areas as soon as they have been identified and preventive action throughout the rest of the system.

There has been a considerable effort in organising internal management information systems (MIS) to support decision-making, but despite much promise and hype, these have performed well below requirements. One major problem in this area is the lack of systematic evaluation of the value addition provided by IT systems. Learning from these experiences, the following points are suggested as minimum design requirements for a successful information-based decision support system:

There has been considerable effort in organising internal management information systems (MIS) to support decision making, but despite much promise and hype these have performed well below requirements. One major problem in this area is the lack of systematic evaluation of the value addition provided by IT systems.

a. Maximum capacity for analysis and use of information should be at the point of entry of information and at the intermediate levels of management, where most of the management action has to be taken. Information flowing to higher levels is ideally curtailed to a very few data elements and a small set of indicators. There is, of course the option provided for higher levels to access and see district and block or primary reporting unit level information if they need to. However, there must be a shift from current designs, which are typically

based on perceived requirements of adminstrators at highest levels, who have little grasp or prioritisation of what is needed at local levels.

b. Systems should allow options for data of different granularity to be uploaded from districts/reporting units and yet be able to integrate the information. The level of granularity would depend on systemic capacity, in terms of human resources, skills, hardware, connectivity etc.

c. No peripheral service provider should have to enter any data more than once, after which, it is up to the system to absorb and process it and to disseminate the necessary outputs to the different users. The burden of data reporting work should not compromise, time spent on more important programme priorities and the proportion between efforts at data collection and use should be optimal.

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d. IT systems should be designed to provide feedback to implementers at peripheral levels and to communities and local governance structures.

e. IT standards as regards data and inter-operability should be put in place and a data policy should specify rules for access to information, storage of information and retrieval. Ease of exchange of information between systems, especially of aggregate numbers should be an essential for the design.

f. It is essential for an independent agency to formally test, report on and certify the capacities of each software in use and certify their compliance to standards. There are such organisations in place which this, but these are seldom used for IT software used in government programmes.

g. Information requirements are dynamic, be it the information collected, reports generated and the different sources and formats of information that need to be integrated, they will all keep changing. In large scale-ups of decentralised system, the applications need to be installed in every reporting and mid-level management unit. For all these reasons, applications based on open standards/open source have advantages and are to be preferred. But the systems of procurement and contracting systems for support for open source systems are very poorly developed and these act as a major constraint to the management of information. Existing IT procurement practices should be tested for friendliness to open source procurement and rules and guidelines appropriate for this process should be introduced.

h. Capacity building is required at block, district and state levels to analyse and interpret the data. Appropriate IT design is one part of the capacity needed, but equally important, is that programme managers require training and support on how to convert this information into knowledge that can be used to trigger management action, improving programme responsiveness and performance.

i. All IT based decision support systems should be evaluated, both for processes, outputs, compliance to standards, integration with other systems and above all for its contribution to improved programme performance. The lack of independent professional evaluation of IT in use is a problem. There is a tendency to present design intentions as actual performance and achievements and attribute gaps in performance to factors considered extraneous to the IT product, whereas, this is really a problem of the design. It is common for awards to be given without even proposing an evaluation. Thus, opportunities for overcoming the problems that are common to most such systems is lost and after such time, the decision support system also gives up and a new cycle starts, with no institutional memory of past efforts and the constraints faced earlier.

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j. Design and leadership of information systems require a mix of knowledge and skills in information science, computer applications and domain knowledge pertaining to programme management in that sector. Such a combination is not easy to find, but must be developed in a team located in the programme management structure or in the resource center, in partnership with professional agencies and specialist institutions.

Conclusion

While decentralisation is widely accepted as an important goal of administrative reform, it is also well-recognised that without the necessary institutional capacity at the decentralised levels, the opportunity to make use of the devolved powers to ensure more effective resource allocation and improved programme outcomes is limited or even lost. However, discussions on institutional capacity are often restricted to issues around the devolution of powers and

to finding and training the right human resources. Moreover, these actions have become increasingly preoccupied with whether rent-seeking and corruption will increase or reduce as a result of devolution, or in other words, in the proposition of a mechanical decentralisation, while doing away with discretion. But, while increasing transparency and accountability is vital, this tends to be a very narrow and ultimately counter-productive approach to the far more diverse, complex and contextual problems of implementation. For, in running large-scale decentralised systems in knowledge intensive areas such as health, education, agriculture, water and energy systems, it is the ability to synthesise tacit knowledge gained from practice in local contexts with more codified knowledge gained from training and technical support, into implementation processes, constant internal learning and renewal and building institutional memory that makes a critical difference between success and failure. As this article has tried to argue, this requires diverse and specific strategies and well-defined institutional mechanisms to mobilise and manage knowledge resources intended to support decision-making that is both flexible and accountable at all levels of implementation, especially by mid-level managers and frontline functionaries, who must constantly apply and renew their knowledge on the ground. Without these in place, the vital potential, financial allocations and expected outcomes of decentralisation, will not materialise. ❑

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NORTH EAST DIARY

MEGHALAYA GETS $ 100 MILLION AID FROM ADB

Meghalaya will be provided with $ 100 million from Asian Development Bank for imparting vocational and educational training, under the agreement signed between Government of India and ADB to upgrade the employability of the youth. This is the first loan to India by ADB under the project 'Supporting Human Capital Development' in Meghalaya. Another technical assistance grant of $ 2 million will be given by Japan Fund for Poverty Reduction to boost civil society organizations and other related state government departments.

NATIONAL SURVEILLANCE PROGRAMME FOR AQUATIC ANIMAL DISEASES

The 'National Surveillance Programme for Aquatic Animal Diseases' was launched at Khanapara, Guwahati in Assam, conducted jointly by the College of Fisheries, Assam Agricultural University and the Central Inland Fisheries Research Institute, Barrackpore. With National Bureau of Fish Genetic Resources, Lucknow, as the nodal institute, this surveillance programme is expected to create a comprehensive roadmap and database to help fight and control diseases by spreading awareness among the fish farmers of the state to become self- reliant in fish production and increase fish productivity to 3000 kg per hectare. Assam is among the 14 states which have been selected for surveillance; in its 8 districts namely Kamrup, Barpeta, Cachar, Nagaon, Morigaon, Somitpur, Lakhimpur and Golaghat the disease screening will be conducted in atleast 10 farms.

PANEL TO TAKE UP NORTH EAST CONCERNS

A six member committee has been set up by the Centre to deal with the problems faced by the people from the North Eastern region throughout the country. This committee will be headed by Mr. Bezbaruah and assisted by the Joint Commissioner of Delhi Police, Mr. Robin Hibu, along with members, one from each North Eastern state and one lay member. Analyzing the problems and reasons behind the recent attacks and racial discrimination faced by North Eastern people, especially those living in the metropolitan cities, this committee will submit its report after two months.

NORTH EAST POWER PROJECTS RECEIVE AID FROM WORLD BANK

To build infrastructure in the Power sector, the World Bank will give a major share of Rs. 8,150 crore project to be executed by State-owned Power Grid Corporation of India Ltd (PGCIL), a 'navratna' power transmission company, to conduct power transmission lines, transmission sub-stations and other related works in different phases in the North Eastern states namely Meghalaya, Manipur, Nagaland, Mizoram and Tripura. The PGCIL will also give technical and managerial assistance for Inter-State transmission and distribution systems. Also, a 'Smart Grid Project' of the Centre will come up in 14 cities all over India on a pilot basis with a cost of Rs. 200 crore in which, Agartala will be the only city from the North Eastern region. The SGP is a digital technology for two way communication between the utility and the customers and also monitors the electricity transmission lines.