

*NAC Working Group on
Reforms in Governance, Institutional Capacities and
Effective Implementation of Flagship Programmes*

Recommendations for
**MOBILISING AND MANAGING KNOWLEDGE RESOURCES:
FOR EFFECTIVE IMPLEMENTATION AND EMPOWERMENT
ACROSS FLAGSHIP PROGRAMMES**

1. Institutional Capacity and Implementation of Flagship Programmes

There are many factors that contribute to the slow and sub-optimal implementation of flagship programmes. While the inadequacy of financing in certain sectors and challenges in governance are of great significance, one of the most persistent and critical problems is the deep lack of institutional capacity within government institutions to deliver on these schemes, especially among institutions of local self-governance.

In this context, institutional capacity may be conceptualised along three interrelated lines:

1. The mandate, powers, rules, organisation of work and work culture that allows an institution to be effective and adaptive to needs
2. The human resources and skills that it possesses, which would include the policies needed to attract and retain these resources as well as to build its competence on a continuing basis
3. The knowledge resources that it is able to access, mobilize and manage.

This note addresses the third component – knowledge management – and recommends actions required to mobilise and manage knowledge resources towards effective implementation of flagship programmes.

2. Recognising Knowledge as a Resource

- 2.1. Knowledge (including technology) must be recognised as a critical resource – on par with and distinct from financial and human resources. Acknowledging this is essential in any effort to build institutional capacity for improved implementation of programmes.
- 2.2. The challenge is to build an adaptive system – a learning organisation – one that learns from communities, from academics, and from its own experiences in implementation, and constantly uses this learning to improve programme outcomes on a continuous basis.
 - 2.2.1. It is vital to recognise all three sources of knowledge as important and complementary: people’s knowledge; academic or professional domain knowledge; *and* implementers’ knowledge. Most often, it is people’s knowledge that is ignored

in programmes. Even in the few cases where its importance is accepted, there are no mechanisms by which this knowledge can be mainstreamed into the decision making process.

2.2.2. Implementers also commonly fail to recognise the role of both past experience and of theory, and tend to waste considerable energy and resources in repeating the errors of the past, instead of learning from them.

2.2.3. A third type of error is to fail to recognise and learn from the knowledge of field and mid-level managers in the implementation chain. This is often tacit knowledge, since field workers may not be able to articulate their concerns adequately, and such workers are usually seen only as persons who receive training, not as practitioners who have valuable knowledge, which should contribute to decision-making.

2.3. Each flagship programme needs to identify and spell out exactly what knowledge resources would be required at each level of the programme –at the national, state, district and local levels – and then using a combination of strategies, ensure that the implementing organisation at each level has access to this knowledge on a continual basis. Staffing the implementing organisation with suitably qualified and experienced persons is necessary, but is not sufficient to access the knowledge required. **We need well-defined and accountable institutional mechanisms to access knowledge resources.**

2.4. In most cases, poor programmatic outcomes are perceived as administrative failures. Indeed, 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. It is our contention that in addition to serious gaps in financial and human resources, flagship programmes suffer greatly from the inability to adequately and appropriately access the knowledge required for continuous capacity building and problem solving. While having technical persons with the right qualifications and experiences certainly helps, no one person can have all the domain knowledge needed and further knowledge is needed across many domains. **What is needed therefore are specific institutional mechanisms, designed to address the unique objectives, requirements and architecture of each flagship programme to access knowledge essential for implementation.**

2.5. While there are important differences across programmatic contexts, there are three main institutional mechanisms commonly used for accessing technical capacity and support, enabling systematic learning, and developing institutional memory across flagship programmes:

- I. Resource Centres
- II. Knowledge Partnerships
- III. Internal Decision Support Systems (MIS or Internal Programme Analytics)

The following sections address each of these mechanisms in turn and recommend specific action to strengthen their design, management and performance. It is important to

recognise that each programme will need a combination of strategies, a mix of approaches, and a range of institutional arrangements to meet their unique knowledge requirements. At the same time, an enabling framework needs to be put in place with specific standards, guidelines and rules to enable effective and innovative knowledge management for implementation across flagship programmes.

3. The Role of Resource Centres

- 3.1. Institutions need to be constantly learning – from the communities who are participants in programme implementation, from the experience gained by those involved in programme implementation, and from efforts at addressing similar problems elsewhere, which may be available in published literature and by interaction with practitioners in other contexts.
- 3.2. Resource centres are organisations set up for this explicit purpose. They are involved in systematic gathering of information on the progress made in programme implementation and the constraints faced. They also vitally address the different ways in which ordinary people and communities respond to, adapt and innovate to make the best of the spaces available to them, and most importantly, to act as institutional memory for the same.
- 3.3. Resource centres are *boundary organisations*: they are *partly academic*, both in reviewing published literature and in commissioning and participating in implementation research and *partly operational*, sharing in the accountability for successful implementation of the programme. Importantly, resource centres may be located within existing organisations or be newly created ones. 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 implementers to improve programmatic outcomes.
- 3.4. 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 important interacting and learning from communities and field level implementers and feeding knowledge from these sources into decision making.
- 3.5. 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 organisations that exemplify the special potential and role that resource centres can and must play as boundary organisations, transforming access to knowledge resources across programmes: as vibrant centres of learning from local communities, building the capacities of implementers and ensuring that their own knowledge and experience is constantly ploughed back into the programme, and in constantly assessing and evaluating programme processes and outcomes in a way that is

truly accountable, rather than aloof or purely academic, in addressing the concerns of local communities and implementers.

3.6. The experience of establishing and running resource centres across different programmatic contexts suggests some of the key aspects that must be addressed for resource centres to work as effective mechanisms for accessing and generating knowledge required for programme implementation:

3.6.1. Primary Objectives and Accountability: Resource centres need governance structures that ensure that they are 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 are 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 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 *uptake* of knowledge from already available sources of knowledge – 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.

3.6.2. Governance and Functional Autonomy: 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.

This could be achieved by constructing resource centers as registered societies with a Governing Board, which has 50 percent representation from implementers who have to use their inputs and the other 50 percent from sources of knowledge, both from within academia and civil society.

It could also be a division of an existing organisation, provided that one is able to provide internal leadership and adequate functional autonomy.

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.

3.6.3. Staffing and HR: Finding the right human resources for these resource centres is important. To the extent that there are good partnerships in place (discussed in the next section), this becomes much easier. The HR composition should be a good mix of those who come from academics, from experts, who are also social activists (where relevant) and from implementers. Community resource persons could be most effective human resource of all and must be given highest priority.

The skilled professionals to staff the resource centres could be on deputation from partner organisations or could be taken from open market. Salary scales are best fixed in parity to the best of the public sector academic institutions, with monetization of perks, and on contractual or on consultancy terms (similar to UGC scales or scientists of CSIR scales).

- 3.6.4. Leadership: Finding the right leadership is very important. But, to the extent we get the internal organisational design right, have clarity on the role and powers of the Governing Board, and ensure that the creation of the organisation and the powers of the Board are well grounded with necessary approvals under government rules, the dependence on a larger-than-life individual leadership to overcome all the usual obstacles to performance can be reduced. One of the critical steps is to develop clarity on which tasks are allotted to the chief executive of the organisation and how he or she in turn allocates and reviews tasks allocated to individual consultants and partner institutions.

4. Managing Knowledge Partnerships

- 4.1. No single institution can build the capacity or mobilise all the knowledge needed for any one of these programmes. 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 would at best be only one or two more persons from within that same discipline leads to loss of capacity, even in the specialist.
- 4.2. Resource centers have typically only a small team in each of their areas of intervention and require partnerships to be effective. For instance, most programmes need considerable IT inputs for their success, but one cannot have a big in-house IT team and even if they are there, it is difficult for them to retain frontline technical capacity in that area. Therefore even where there are effective resource centers, partnerships are needed and conversely, partnerships are best harnessed where there are dynamic resource centers.
- 4.3. The recommended mode of partnership is a strategic MOU which provides support to the partner organisation in return for some fixed periodic deliverables over a one, three or even five year period, with an understanding that they would be available for short-term tasks that might come up from time to time. Partnerships could be with university departments, research institutions, NGOs with specific skills, or commercial consultancy organisations.
- 4.4. What is urgently needed is the approval of an appropriate set of rules for managing knowledge partnerships that enable:
- Transparent selection

- Appropriate contracting agreements, appraisal and renewal processes,
- Grievance redressal, where necessary

4.4.1. Quite often partners require capacity building themselves and the government may have to invest in these. We recognise that there are specific technical skills which are needed at every district level, but which existing organisations cannot provide. Therefore, a choice must be made to build capacity in local knowledge organisations so that they could help the programme in the long term.

4.4.2. The suggested process for selection is an empanelment by Expression of Interests, and then selection amongst these based 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 that locality or a ceiling for the number of districts or projects to be given to any one agency.

4.4.3. This also means that there should be no L1 process for finalising the rate. The rate is pre-fixed or fixed by negotiation using parameters of other such work done by the agency. The selection process is based on merit points alone, and merit scoring must include considerations of long term local capacity development and inclusiveness.

4.4.4. Grievance redressal mechanisms are required for smaller NGOs and consultancy organisations to appeal to if there is disregard of the terms of the contract by arbitrary administrative action.

4.5. The following mechanisms may be consider for capacity building in knowledge partnerships, which would both substantially increase the value of these partnerships to programmes and make such engagements attractive to prospective partners:

- a. Create and pay for faculty positions in educational and research institution, so that the partner organisations are larger and have a 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. The problem of much of the academic inputs 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, much less come up with 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 on an annual basis or carrying out the national family health survey on a recurrent basis.

5. Decentralized Decision Support Systems (Or Management Information Systems /Programme Analytics)

- 5.1. All flagship programmes require detailed information about how the programme is proceeding at the level of local implementing units (village or facility) and at mid-level management units (block or districts). This information, with the minimum frequency and reliability, is needed to take the appropriate management decisions and identify problems as early as possible, triggering corrective actions in the area where the problem was identified and preventive action throughout the rest of the system.
- 5.2. Such information is also essential for resource centers and implementing organisations to be learning organisations, constantly learning and adapting to problems and opportunities as and when they arise. This would give rise to a more dynamic organisation of work and adaptation of programmes to suit local needs, rather than a static one size fits all programme design. Information from communities and participatory processes need to flow into resource centers and inform decision makers.
- 5.3. 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. Learning from these experiences we recommend the following as the minimum design requirements for a successful information- based decision support system:
 - 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 flows to higher levels are 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 administrators at highest levels, who have little grasp or prioritization of what is needed at local levels.
 - b. Systems should allow options for data of different granularity to be uploaded from different 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 for the systems to absorb it, process it and give 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 (ideally data element to indicator ratio of 1: 1.5 but at least 1:1).
- 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 to 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 do this testing, but these are seldom used for IT software used in government programmes.
 - g. Information requirements are dynamic – information collected, reports generated, and the different sources and formats of information that need to be integrated– will all keep changing. Also in large scale-ups of decentralised systems we need the applications 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.
- 5.4. 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, 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.
- 5.5. Information from routine reporting by peripheral functionaries is only one source of information. This information is supplemented by information from sample surveys, and from sentinel sites. Triangulating data from multiple sources would allow for both greater reliability and better quality of interpretation of the information. This too requires higher levels of capacity.
- 5.6. The capacity to gather information and feedback from communities is a great challenge and critical need. Most data in this regard would be qualitative. Such information will assist programme managers to understand the causes of programmatic gaps much better.
- 5.7. The strategy to collect disaggregated data needs to be thought through. Data disaggregated for economic class, rural residence, gender, caste, community, religion, and age is often required for decision-making. Where primary records are entered as such into electronic forms, the disaggregated information required can be generated electronically. But where the inputs are of aggregate numbers, a requirement to collect

disaggregated information would lead to a major multiplication of number of data elements collected and this in turn would seriously compromise data quality while increasing the burden of data reporting and processing. The alternative rests in supplementing routine information that keeps disaggregation to a minimum with different forms of sampling, from household surveys, primary registers or some select indicative sites.

- 5.8. Data quality depends more on snags in the organization of information flow and design of the system than it does on errors – intentional or otherwise. 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 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 is given up and a new cycle starts, with no institutional memory for past efforts and the constraints faced earlier.
- 5.9. 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 or institutions, which are specialized in informatics.

6. Summary: Ten Key Action Points for Knowledge Resource Management Across Flagship Programmes

1. Every flagship programme must have acknowledged knowledge partners that are organisations with which there is a strategic MOU. The MOU will state the deliverables expected of the organisation and the support and enabling actions that the flagship programme would provide. In addition to the deliverables under the MOU, there should be specific contracts for specific tasks as needed. Some departments have already developed such MoUs which could be studied and a model MoU developed and shared with all flagship programmes.
2. The implementing organisation of each flagship programme in every district and state level must be aware of the knowledge partner or partners assigned to it for each knowledge domain where support is needed and should look to it for knowledge support. Under the MOU, the partner organisation would be bound to provide such knowledge as required by programme implementers. The MoU must identify the requirement of knowledge support at every level and the mechanism through which the district or sub-district can obtain the knowledge

3. The government, either through the Department of Personnel and Training or through the Department for Administrative Reforms or the Planning Commission or the concerned Ministries/Departments should issue a set of Rules and Guidelines that are appropriate for making and managing knowledge partnerships. These should not be based on a mechanical understanding of L1 but on the approach suggested in paragraphs 4.3 and 4.4. above. The current rules can be interpreted and stretched to make such partnerships, but such an *ad hoc* approach is very vulnerable to audit and administrative arbitrariness. It is necessary to provide a specific set of enabling rules.
4. Systematic capacity building in knowledge partner institutions will be required if they in turn are to provide support to districts and states. The mechanisms indicated in paragraph 4.5 above and should be actively encouraged. Funds should be provided within every flagship programme for this purpose.
5. All flagship programmes will require resource centers at national and state levels. These could be shared across flagship programmes, which would encourage convergence, as appropriate. They may not be required at the state level, if there is an appropriate partner organisation in place, which provides the required support. The partner organisations would act in coordination with the resource centers of the flagship programmes. Resource centers are required as apex centers of technical support that coordinate technical assistance activity and maintain an institutional memory of the same. They serve to identify the problems and articulate the requirements of the flagship programme in technical terms. They know which organisations to approach for what needs and help in making contractual arrangements. There are some needs, which are best served by them directly. In addition efforts should be made to build institutional capacities of the concerned Ministries /Departments by utilizing the existing resource centres like NIRD/SIRDs. We also need to create mechanisms for PRIs to access knowledge resource centres.
6. The establishment of resource centers must be facilitated by a set of broad guidelines for governance, HR policy and financial and operation flexibilities, which would enable resource centers to be formed and function (as indicated in paragraph 3.6 above). *Whether this is located within existing organizations or in newly created ones is a choice to be made on specific circumstances but the minimum standards of governance, HR and operational flexibilities needed should be ensured.*
7. Skilled professionals to staff the resource centers could be on deputation from partner organisations or it could be taken from open market. Salary scales should be fixed in parity to the best of the public sector academic institutions, with monetization of perks, and on contractual or consultancy terms (similar to UGC scales or scientists of CSIR scales).
8. The data analytics of every flagship programme should meet the architectural standards or design requirements as defined in paragraph 5.3 above. An appropriate agency, preferably under the government, should have to certify that these design requirements

are met. Such an agency should not itself be involved in making applications and software products.

9. The procurement and contracting policies that are in place for the development of decision support systems should be re-examined so that it is friendly to open source platforms and so that it supports collegial, collaborative development of analytics across many players. What we need is the absence of licensing, and a space for multiple efforts at developing prototypes and then learning from all of them, scaling up and continuously improving on the applications, instead of a one-time product.
10. The above action steps would go along with HR measures that generate the skilled workforce that is needed and develop the required in-house skills. It would also go along with financing and governance mechanisms that allow decentralised but effective decision-making. Without under-estimating the importance of these measures, this note limits itself to its mandate, viz the importance of effective mechanisms for accessing knowledge resources as a key dimension of institutional capacity.