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Management development for public health: India

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REACHING THE UNREACHED: CHALLENGES FOR THE 21ST CENTURY

Management development for public health: India

John Calvert and Richard Franceys, WEDC

THE INCREASING ECONOMIC liberalisation in India and subsequent interest in sustainable commercialised public services is creating a need for change in the senior managers in the water and sanitation sector.

The public health sector in India is run by engineers who are excellent administrators but who have very little understanding of strategic management, institutional development and the wider policy issues of environment, gender and commercialisation. Long term success requires a change in the knowledge, skills and attitudes of the responsible managers. A key method for achieving that change is a management development training programme to address the issues.

'Total change is my concept. Change in one person is not sufficient.'

These programmes need to focus on management and institutional development for functional experts linked with effective use of the most suitable technology. As an example, the demand for management development programmes at ASCI (Administrative Staff College, India), Hyderabad demonstrates that there is a clear demand for management training in India, both from government and private companies. However, the public health sector is still learning the need for this type of training which justifies having an element of foreign assistance.

'Training is only effective if training is passed on.'

The UK ODA has been supporting one such programme for the past two years and the intention is to transfer it to a prestigious Indian training institution, ASCI over the next three years. The objectives of the programme are to enable senior engineers (and potentially other public health officials) to become aware of the broader range of issues that have to be considered in public health engineering. These include technology choice, environment and gender and particularly the management of utilities in a liberalising economy and the skills to be able to use these ideas to improve effectiveness and efficiency in water and sanitation organisations.

'Most of the things we will not be able to transfer from here - but we can use the motivation - and become examples for the lower staff in our use of management styles and financial skills.'

Knowing the limited return on investment in training programmes which are not linked in with working practices the programme has four main components: five weeks in UK focusing upon technology as well as management, ten days in India carrying out field-work, a return to normal work for six months to try and put into practise Personal Action Plans and then finally a two week review and reinforce programme at ASCI.

'There has been a very good blend of technology and management - if it had only been management the effect would not last. Step by step the programme kept adding to our understanding. Now we are able to look at our organisation in a different way.'

The programme emphasis on management and institutional development from a foundation of public health engineering has been successful in raising awareness and generating change in the management of public health infrastructure programmes in India. As well as Personal Action Plans participants have to prepare an Institutional Development Project describing the existing situation of their institution and their proposals for how it might be developed.

'Make us accountable - we achieved 50-60 per cent of our Personal Action Plans before coming to ASCI'

'The foreign component is good - to tell something in India isn't always believable as there are few examples.'

Direct benefits are already being obtained from changes individual trainees put into effect on their return to their work places. In addition there is the potential to transfer such programmes to Indian training institutions, as direct training counterparts and in University Postgraduate programmes supported by the Ministry of Urban Affairs and Employment and the Ministry of Human Resources Development.

'I had been given the job of looking after on site sanitation but didn't really know what to do with it. Now I understand its significance I can start talking to the municipal corporations and promoting it.'

'After this course I have more confidence, especially in leadership qualities.'

In the first phase visits were made to water and waste water treatment plants in UK and France which gave rise to interesting comparisons between the technology used and also into the different styles of privatisation. Having the foundation of technology from which to build on the management skills has been crucial to gaining acceptance and use of new management ideas. Study fellows are required to complete Daily 'Reflective Learning Logs'

Table 1

WATER*man* Simulation Exercise **1995 India Programme Final Results**

PERFORMANCE INDICATORS	*START* *ALL*	End City 1	After City 2	Five City 3	Decision City 4	'Years' City 5
Percentage of unaccounted for water	37.4	29	40	23	30	38
Staffing Ratio (connections per employee)	35	66	45	53	81	40
Average domestic tariff per m3	0.25	$0.40	$0.50	$0.45	$0.58	$0.55
Infant morbidity (diarrhoeal)	11.0	11.69	15.40	11.23	17.97	16.39
Unserved population: water	233532	238,569	273,540	256,285	314,137	301,069
Unserved population: sanitation	245599	350,418	333,371	101,611	293,848	339,707
Return on fixed assets	-0.49%	12.11%	20.83%	4.66%	10.38%	6.07%
Debt Equity Ratio	21%	41%	17%	60%	88%	61%
Cumulative Grants Received $		10,904,471	10,086,160	16,139,298	11,254,103	11,087,400
Maintenance Ratio (% of revenue)	4%	3.1%	3.5%	7.2%	0.7%	4.7%
Training Ratio (% of revenue)	0.7%	1.9%	1.8%	4.8%	6.1%	2.6%
IEC&OSS Ratio (% of revenue)	1.6 %	7.5%	10.6%	13.6%	6.1%	9.1%

with weekly summary sheets submitted to reinforce the learning process.

'The foreign trip is a must.' 'Visits - seeing is believing - for example going to Leicester City Council to see the coding of work, systematically.'

'The training has converted us.'

One participant's comments on the UK phase reported that the most interesting aspects were: the work culture of UK; proper management and financial management of various schemes; commercialisation and privatisation; modern treatment processes; mechanisation and automation in a limited way; use of computers; updating of records; charging flexible tariff rates; French and UK systems of management.

'I gave a resume to my Member Secretary and he said 'I myself should go on this course.'

Simulation exercise

One of the techniques used to give participants a valid experience of strategic management is a simulation game developed by WEDC. In this simulation participants have to choose their strategic objectives and then make decisions on an annual basis regarding investment, operations expenditure, manning and pricing. At the end of each 'year' or cycle participants receive financial statements detailing their commercial performance as well as performance indicators for their city detailing service coverage as well as, for example, infant diarrheal morbidity.

The Waterman simulation game is extremely effective in teaching Study Fellows the key elements of managing a water and sanitation utility and the affects of their sometimes precipitate actions in investments or tariff increases. Final results of the 'cities' which have to be managed demonstrate an interesting divergence, all having started from a common base. From the figures in Table 1 can be seen the priority participants placed on achieving financial sustainability, albeit with significant grant elements having learnt those techniques during the programme. The most 'successful' groups had also recognised the critical importance of investing in software, that is in institutional development and training and in Information, Education and Communication. However, in achieving those goals the groups had lost sight of coverage as the growing cities absorbed and overtook their limited investments in water production and distribution.

The exercise also serves as an excellent vehicle for showing participants the value of spreadsheets in decision-making. The inclusion of the responsibility to manage all aspects of public health, including sanitation for the poorest is also an 'eye-opener' for some participants.

Bench-marking

'Bench-marking is a new outlook.'

Before gathering for the final phase at Hyderabad, Study Fellows were asked to collect information regarding the performance of their own institutions. This was then collated with information from the previous year's participants to demonstrate the value of bench-marking efficiency and effectiveness indicators between institutions. Some of the results are shown below and proved to be interesting to participants who saw the value of being able to explain comparisons to their non public health superiors. It is envisaged that this data will be circulated to the previous year's participants to stimulate their thinking and be extended to include new locations in future programmes.

'I will now do bench-marking in my 55 towns.'

Bench-marking involves comparisons of profiles of real data, i.e. of achievable outcomes. Each study fellow could see where his organisation achieved lower values than others and where it achieved higher values. If one area can get unaccounted for water down so low why can't another? It may be that the two situations are radically

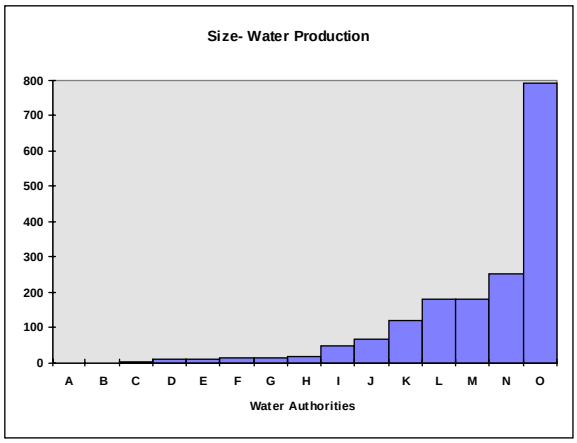


Figure 1.

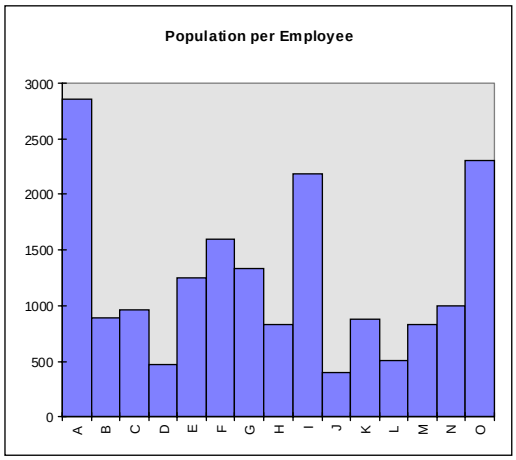


Figure 2.

different. However, Bench-marking has the advantage of indicating where questions should be asked. The first surprise from the data collected was the variety in the size of the water supply providers given that the study fellows were all at equivalent positions of Superintending Engineer or higher. Over the two year's of data the size of systems under consideration ranged from 1mld to 790mld.

'I didn't realise how different in size our organisations were.'

A second advantage of bench-marking is that it enables various popular economic theories to be exposed toreal situations. For example, are there economies of scale or is it that over a certain size an organisation becomes more complex and starts increasing it's range of activities?

'Surely the bigger places should serve more people per employee?'

But Figure 2 shows no economies of scale.

Similarly, is unaccounted for water higher in high consumption areas or in high tariff areas following a comment that '*Unaccounted for water is more through illegal connections than through wastage*'.

The plot of unaccounted for water against domestic tariff shows no obvious links, in other words any suggestion that the cost of water leads to illegal connections which leads to unaccounted for water is not proven.

It could be that unaccounted for water is more wastage on high volume water transmission but the plot of unaccounted for water against personal consumption of water shows no such link. Hence the cause of unaccounted for water lies elsewhere.

The most important use of bench-marking however, is to allow each organisation to see where it seems to be lagging behind another. The lesson of the charts so far is that no organisation is top on every measure and so every organisation has something to learn from bench-marking. Which shows that the biggest can learn from the smallest and vice-versa.

Finally as regards efficiency ratios the study fellows were reminded that the key point of comparison, particularly between countries, should be the raw data since comparisons of ratios may mislead. For example, any ratios involving employees ignore the salaries of those employees. In a low-income area it makes sense to use

Table 2

Performance indicator	*Best in group*	*Performance indicator*	*Best in group*
Quantity water produced	O	Metered consumption	E,I,K,M
Quality water produced	E,K	Quality water delivered	E,K,M
Energy as % operating costs	K	Service coverage	L
Target population	O	Water related diseases	K
Connections	O	Employees	E
Service coverage	F	Connections/employee	O
Connections/standposts ratio	D	Population/employee	O
Service timing (hrs/day)	F	Average domestic tariff	A
Population density	M	Average commercial /industrial tariff	K
Unaccounted for water	E	Sewerage sustainability	M
Quantity water consumed	L	Bill collection efficiency	E

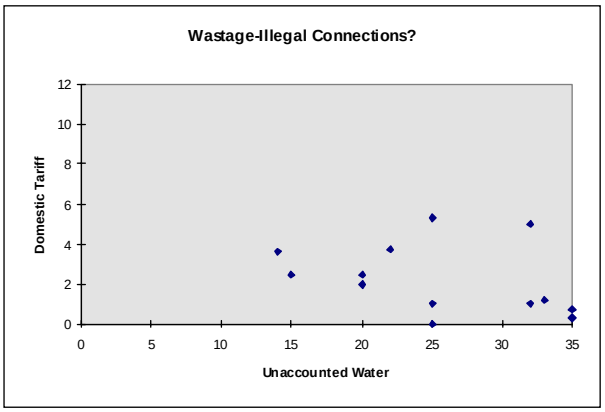


Figure 3.

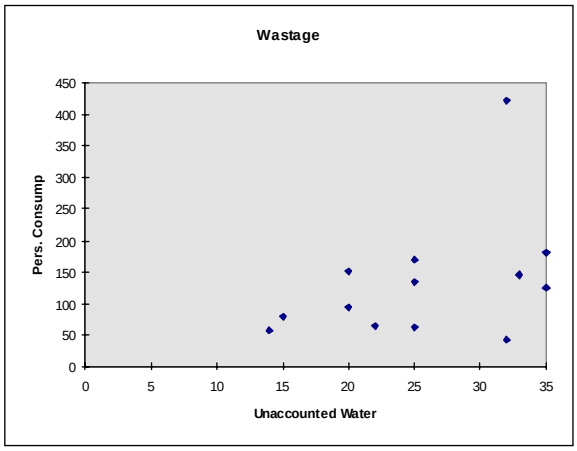


Figure 4.

more labour intensive methods, whereas in a high income area it makes more sense to use more technology.

Conclusion

Effective management development for senior engineers and mangers in the public health sector requires a range of approaches as described in this paper. Management development is known to be expensive but using techniques such as daily learning logs, simulation exercises, bench-marking and personal action plans with split programmes and report-back periods it is possible to maximise the benefits obtained. Whatever the cost of management training, the cost of not improving an organisation's management capability in a rapidly changing public sector environment is far greater.

'We came as engineers but we are leaving as managers.'

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