NUMBERS AND NEEDS IN LOCAL GOVERNMENT

Addressing civil engineering – the critical profession for service delivery

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Abstract

The research carried out for the publication 'Numbers and Needs, Addressing imbalances in the civil engineering profession' [1] highlighted a number of glaring challenges. Of importance was the fact that municipalities were desperately short of civil engineering professionals (engineers, technologists and technicians) whilst students and graduates were battling to find experiential training and employment opportunities. At the same time many experienced engineers who had been encouraged to take early retirement were available to return to the coal face. A programme was thus initiated in which retired engineers, paired with students and graduates were deployed in municipalities to address service delivery, at the same time as offering training and workplace experience to the young people.

The experiences, successes and recommendations of the teams deployed were compiled and published in the book 'Numbers and Needs in Local Government' in November 2007. The overriding conclusion of their experiences and the research carried out both locally and internationally is that the civil engineering capacity in local government is too low to deliver, operate and maintain local government infrastructure in a sustainable manner. The key recommendations are to rebuild structures, rather than embark on further restructuring exercises; and professionalise rather than politicise the appointment of technical staff. Systems, processes and organograms supporting career pathing and professional development should be redeveloped, linked with technical competency profiles to ensure that our national assets are adequately developed, operated and maintained.

Introduction

Background

The research carried out for the publication 'Numbers and Needs, Addressing imbalances in the civil engineering profession' [2] highlighted a number of glaring challenges. These included the fact that the civil engineering industry was going to require at least a 30% increase in skills to address 2010 development and delivery of the Millennium Development Goals. Furthermore, municipalities were desperately short of civil engineering professionals whilst students and graduates were battling to find experiential training and employment opportunities. It was also found that many experienced engineers had been encouraged to take early retirement. A programme was thus initiated in which retired engineers, paired with students and graduates were deployed in municipalities to address service delivery, at the same time as offering training and workplace experience to the young people.

Scope and methodology

The project known as ENERGYS (Engineers Now Ensuring Rollout by Growing Young Skills) was rolled out in some 70 municipalities. Naively it had been thought that the deployed teams would contribute significantly to service delivery, and development of the young people. Sadly the teams were hindered in their progress by the many maladies which beset local government. These included reducing technical capacity; little recognition of professional judgement; inexperienced management and lack of decision making; the loss of institutional knowledge, missing data sets and the demise of many systems. Long and complex processes affecting purchases, the award of tenders and the appointment of staff further exacerbate the situation.

The ENERGYS senior deployees were harnessed to research the many bottlenecks and develop policies and recommendations on turnaround strategies to assist their municipalities rebuild capacity, systems and processes.

[1] Lawless, A 2005. *Numbers & needs: addressing imbalances in the civil engineering profession.* Midrand: SAICE.
[2] ibid

International research was also carried out to understand norms and standards with a view to supporting or enhancing the recommendations being compiled. Emanating from this input 'Numbers and Needs in Local Government' [3] was published in November 2007.

Structure of the Report

To develop and motivate the many changes required in the future, technical successes of the past were explored and compared with the present capacity, processes and approaches. The benefits and weaknesses of the various approaches are analysed including the consequences of reduced engineering capacity, expenditure and policies on quality and long term growth.

Looking forward, civil engineering structures, capacity and modifications to policies are proposed to create a more enabling environment for service delivery. Many innovative ideas are offered to address job creation, more efficient service delivery and local economic development.

Finally looking at the extent of infrastructure and the backlogs in South African Local Government, actual numbers of civil engineering staff are suggested as a first step towards reversing the demise of technical capacity. Change management strategies are outlined to transform municipalities into long term sustainable organisations and the rally cry is sounded for all to work together to create local government that will address its vision of service delivery for all.

Conclusion and Recommendations

The overriding conclusion is that the civil engineering capacity in local government is too low to deliver, operate and maintain local government infrastructure in a sustainable manner. Furthermore, career pathing and training of future professionals no longer takes place except in a handful of municipalities which does not bode well for maintaining even the current numbers. The key recommendations are to rebuild structures, rather than embark on further restructuring exercises; and professionalise rather than politicise the appointment of technical staff. Systems, processes and organograms supporting professional development should be redeveloped, linked with technical competency profiles to ensure that our national assets are adequately developed, operated and maintained.

The past

Service delivery in local government until the late eighties

In apartheid South Africa, established local government served some 14 million people, at a time when there were well populated structures boasting 2500 to 3000 civil engineering professionals. This translated to some 20 civil engineering professionals per 100 000 people.

Efforts were concentrated largely on town and city dwellers, as well as on the development of infrastructure to support industry, tourism and other land uses that earned income for municipalities through a substantive rate and service base. As a result of the continuous flow of income, funds were generally available for ongoing operations and maintenance (O&M).

There was an adequate number of technical staff to handle the complete civil engineering process, including planning, design, documentation, construction and O&M. In effect, the engineering department was client, service provider, and financier, offering consulting and contracting services for new projects, as well as O&M, while the local authority either provided finance or was able to raise its own funds through commercial loans.

A complete hierarchy of technical staff was in place to attend to development and O&M. See Figure 1. Junior staff would learn much about local government from superintendents and artisans when placed in O&M teams.

The need for staff development was well understood. Young engineers and technicians gained workplace training under the watchful eye of those more experienced. Career pathing was in place and youngsters progressed up the corporate ladder as they became more competent, without the need to move to another municipality.

[3] Lawless, A 2007. *Numbers & needs in local government: addressing civil engineering – the critical profession for service delivery.* Midrand: SAICE.

The City Engineer was the most senior technical person and was one of the most powerful people in the municipality. He controlled huge assets and infrastructure budgets, and made both short- and long-term decisions about the development of bulk and end user infrastructure. He was responsible for town planning, building control, architecture, land survey and all civil engineering infrastructure. He was generally an astute highly qualified registered engineer with years of experience in local government.

Tried and tested processes and systems were in place in terms of short- and long-term planning, budgeting, managing development and building control; handling emergency as well as planned maintenance; and detailed records including drawings, designs and contracts were maintained for reference by all.

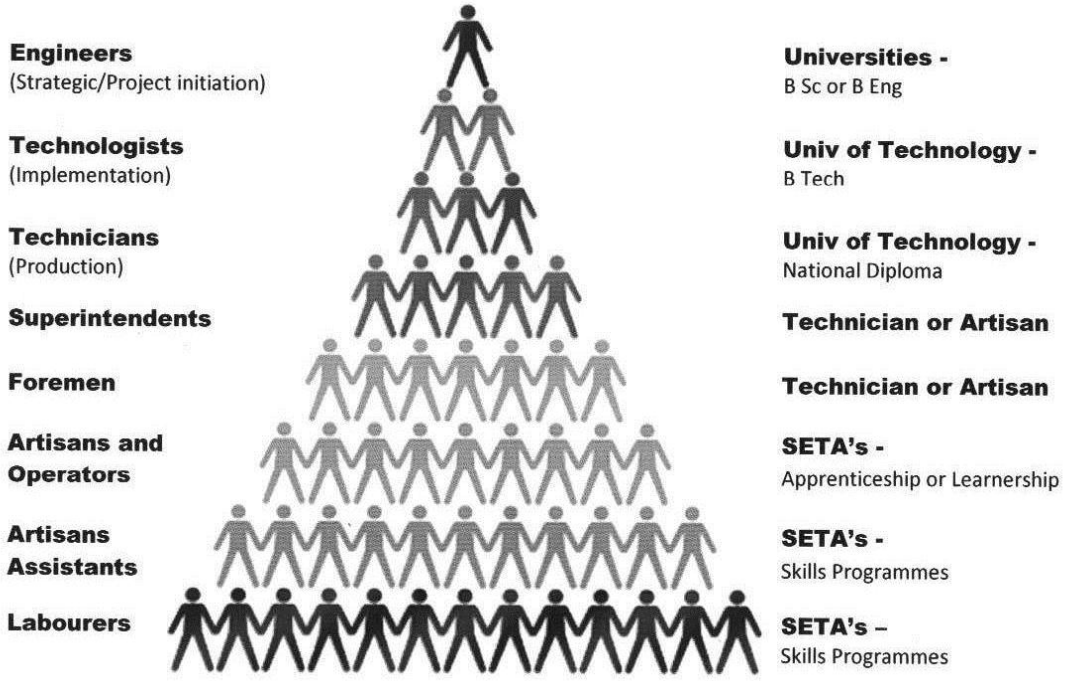

Figure 1: The technical team and related qualifications

The move to outsourcing

Towards the end of the eighties, in line with international trends, design and construction were increasingly outsourced to the private sector i.e. to consulting engineers and contractors. Thus began the slow but sure break down of the tight knit teams that planned, developed, operated and maintained municipal engineering infrastructure. In the move to transfer design and detailed planning to consulting engineers, little thought was given to the need to retain planning capacity to attend to long-term and master planning. By relying more and more on contractors to handle all new projects, the need for teams of artisans and labourers and maintaining fleets of yellow machines and other equipment reduced. This has ultimately affected local government's ability to respond to emergencies and effectively handle ongoing maintenance.

The present

Restructuring in the New South Africa

In the new South Africa, restructuring and rationalisation resulted in many technical staff being offered packages at a time when local government was being expanded to serve some 44 million people and service backlogs were enormous. Furthermore, senior technical posts were considered to be management posts and technical staff were replaced with non-technical managers. Support services were moved into central non-technical structures, further reducing the technical direction and input into processes and decisions.

Over the years technical staff losses have continued and today the ratio of civil engineering professionals per 100 000 people has dropped to a paltry two. This presents a huge challenge as service delivery can no longer be business as

usual, but requires experience and creativity to address massive backlogs and put systems in place to ensure that services are sustained.

Reducing numbers and budgets being focused on the Millennium Development Goals has meant that little attention has been paid to developing infrastructure to attract and support industry, appease increasingly frustrated rate payers or attend to operations and maintenance. The number of technical staff is now just too low to cope with infrastructure challenges.

Whilst it may be expected that the numbers required would be lower than in the eighties, an international scan shows that we were already trailing the English speaking world at the time and nowhere is any developed country near the South African lows which are now in place, as can be seen in Figure 2. Figures gathered from centres in the neighbouring states indicate that the average number of civil engineering professionals per 100 000 in these countries is just below ten.

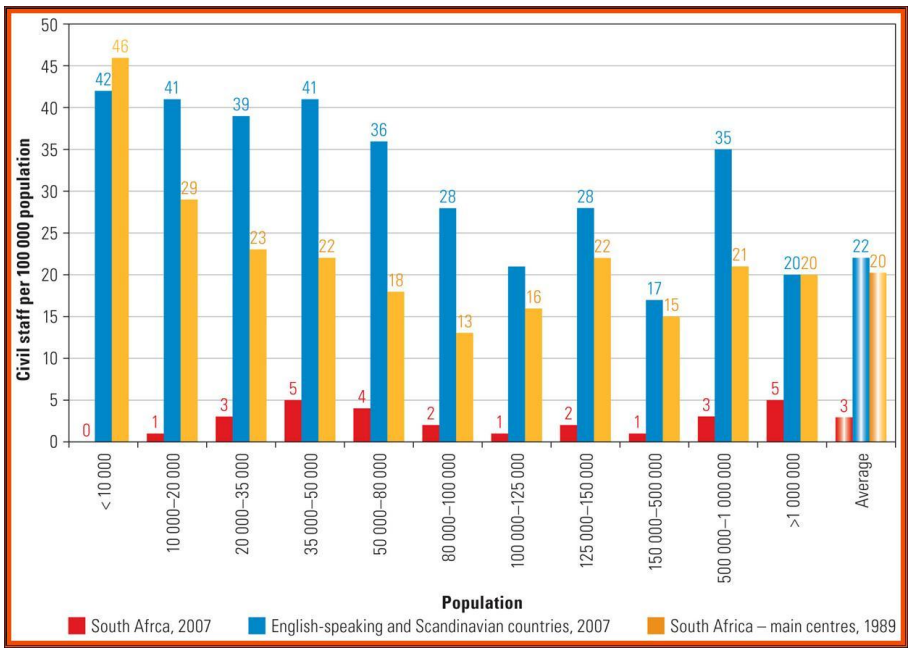

Figure 2: English-speaking and Scandinavian versus South African municipalities: civil staff per 100 000 population

The consequences of reduced technical capacity

As a result of the limited technical capacity targets are not being met, infrastructure is failing and sadly backlogs are being developed. The consequences are outlined below.

Planning

As discussed, detailed planning is now handled by the private sector. The need for forward and master planning has not been understood and therefore this planning has fallen by the wayside. Timeous expansion of bulk infrastructure rarely takes place. Only when supplies or capacity reaches crisis proportion such as water only being supplied for a few hours a day or sewage flowing in the streets, etc, is attention given to bulk development. Without adequate transport networks, industry is unable to expand its distribution network, often stifling the growth of local economies.

The lack of planning gave rise to the Integrated Development Plan (IDP) document, which was meant to guide municipalities through the planning process to ensure that the above scenarios would not take place. Unfortunately without technical, transport, economic, town and regional planners developing and maintaining long-term plans, IDPs have generally become wish lists made up of many isolated and often non-strategic projects.

Development

With limited technical capacity to adequately specify projects, manage service providers, review designs and monitor contractor progress, funds are being wasted on much abortive work. When investigating projects underway in municipalities to which ENERGYS seniors were deployed they found that only 51% of capital/MIG projects were

completed satisfactorily (with the normal niggles). The balance had either failed due to poor design, inadequate contracting, or required major interventions to ensure they were eventually completed.

Operations and maintenance

The challenges in O&M are well known. Water and effluent quality which do not comply with national standards, outbreaks of waterborne diseases, reduced water pressure, limited water supplies, etc have all manifested in recent years. Failing roads have prompted many industries to close off supply lines crippling those from whom they purchased.

Systems and processes

The loss of institutional knowledge, data, and dismantling of systems and procedures exacerbates the already precarious situation. There is limited control over developers from whom considerable sums could be earned by way of bulk contributions; water and electricity losses continue to soar as readings and accounts are not adequately managed and tariffs are not reviewed; and processes to ensure that emergencies are logged and attended to are often non-existent!

In other areas, the development of systems and controls have all but brought service delivery to a standstill. Purchases and appointing service providers has become a nightmare through the complex supply chain process; appointing staff through the HR process has become long winded and rarely yields the correct result as technical applicants are often selected by non-tehcncial staff; and training programmes simply do not get off the ground as a result of the complex skills development process and paperwork which must be filled in! Reporting has also becoming a time consuming process which robs technical staff of many hours of productive time.

The future

Clearly it is time for action. It will be necessary to rebuild technical capacity and review systems, processes and structures to create a more enabling environment for service delivery.

Rebuilding technical capacity

Rebuilding capacity will require a multifaceted approach including:

- Re-designing organograms to ensure that sufficient and appropriate positions exist to supply and service infrastructure and support ongoing training
- Implementing comprehensive selection and training schemes to develop a new cadre of engineering professionals
- Creating an environment that will entice those with experience back into senior technical positions and ensure that those with experience remain

In determining numbers and designing organograms all technical aspects outlined in the project cycle in Figure 3 must be taken into account. Master plans based on sound asset registers should inform the IDP which should outline the full spectrum of activities required, including numbers and levels of technical staff.

Overall numbers required

As outlined, the number of civil engineering professionals employed in local government has dropped to a level which can no longer support or sustain service delivery. Studying work breakdown structures and the few municipalities that were coping, when carrying out research for Numbers and Needs, suggests that at least one civil engineering professional is required per 20 000 population i.e. five per 100 000 population.

A more rigorous formula given below has been developed which is linked to households and the service authorities assigned to each municipality. Service authorities per structure have been determined per province. In some provinces, the districts have been assigned the road and stormwater functions and the local municipalities have been given responsibility for water and sanitation, whilst in others the roles are reversed. The range of authorities and associated service provision responsibilities related to civil engineering is as follows:

- Abattoirs
- Airports
- Amenities
- Beach facilities

- Billboards
- Cemeteries
- Fencing
- Fire fighting
- Markets
- Municipal works
- Planning
- Pollution
- Pontoons and jetties
- Public transport
- Roads
- Sports facilities
- Stormwater
- Sanitation
- Solid waste
- Traffic engineering
- Water

In terms of services provided by the engineer, the household is the end-user. Thus the appropriate measure to use for determining numbers required is the number of households. Population per household varies per province. The density per household however does not affect the number of engineering staff but rather the size of bulk infrastructure required. The phenomenon of household splitting will give rise to an increased demand for services, even if the population does not change.

(a) The household formula

The number of civil professionals required, based on households is thus designated as NH and is calculated as follows:

NH = 1 + ROUND (N/5 000 * ΣCEF/9)

Where,

ROUND refers to the rounded value in the brackets. If the decimal value is less than 0,5 the whole number should be adopted. If the decimal value is greater than or equal to 0,5 the next whole number should be adopted

N = number of households, and

ΣCEF = a + b + c + d + e + f + g + h + i (the sum of the civil engineering functions performed in a municipality)

Score 1 for each of 'a' to 'i' if the following functions are performed or 0 for each function that is not the responsibility of the municipality

a = planning (every municipality should perform a planning function!)
b = road service provision
c = stormwater service provision
d = sanitation service provision
e = solid waste service provision
f = traffic engineering and transport planning
g = water service authority
h = water service provision
i = has a PMU

If a municipality predominantly supplies dry sanitation and limited water-borne sewage networks, set 'd'=1/2.

As an example, a small town with 10 000 households that does not have a PMU and is located in a district that carries the water services authority and provision function would score as follows:

a = 1 – does perform the planning function
b = 1 – is responsible for roads
c = 1 – is responsible for stormwater
d = 0 – is not responsible for sanitation

e = 1 – is responsible for solid waste
f = 1– is responsible for traffic and transport planning
g = 0 – is not a WSA
h = 0 – is not responsible for water
i = 0 – does not have a PMU

that is, ΣCEF = 5

N/5 000 * ΣCEF/9 = (10 000/5 000)*5/9
= 10/9

This would round to 1, making the total number of civil staff required = 2

that is, NH = 1 + ROUND(10/9)

With no water, sanitation or PMU responsibility, the two staff members would be devoted to roads, traffic and solid waste. One would possibly handle the strategic issues and capital projects and the other would manage O&M.

(b) The land use factor

The formula given above relates to households only. However, in larger towns many erven do not relate to households but to a range of other uses such as business, commercial, industrial, mining, education, tourism, entertainment, sports, health, ecclesiastic, public, and state-owned enterprises. Thus an adjustment must be made, as follows:

NL = NH * (area of municipality - the area of farms – area of public open space area of residential erven)

Where,

farms plus public open space are subtracted in the numerator as neither of these land uses require servicing. Taking as an example the previous town a look at their land use areas yields the following:

Total area of the municipality = 800 km2
Area of farms = 400 km2
Area of public open space = 160 km2
Area of residential erven = 200 km2

Therefore,

NL = NH * (800-400-160)/200
NL = NH * (240)/200

(c) The ubanisation factor

Over 80% of South Africa's economic activity is concentrated in 15 urban centres. A further demand on engineering capacity is made as a result of urbanisation. This is seen mainly in the large cities, but throughout the country people are moving from rural settings to towns and cities. With insufficient low-income housing stock, squatter settlements continue to grow. These are a headache to engineering departments as they must provide some form of rudimentary service and must also plan and design new areas to eventually accommodate these people. Thus they have to deal with these households twice!

Cities require many sophisticated services, such as transport infrastructure, to provide access and mobility for large numbers of people. Increased pollution and many other factors further increase the load. An adjustment must be made to allow for additional staff that must be employed to cope with this extra workload.

The number of civil professionals adjusted to take account of the extra workload owing to urbanisation is designated as NU and is calculated as follows:

NU = NL * (N + NINF) / N

Where,

NL = the number of civil professionals calculated so far based on the number of households and land use

N = number of households
NINF = number of informal households

Continuing with the example, although the town is officially responsible for 75 000 households, an additional 3 750 are informal households that require a lot more attention. Thus the total number of civil professionals would increase as follows:

NU = NL * (75 000 + 3 750)/75 000

(d) Other considerations

The set of formulae given above should be used as a guide only. If a municipality has fewer civil engineering staff the chances are that services are in a poor state. If a municipality has more civil engineering staff than suggested the additional staff should not be retrenched. There are many other parameters that demand extra pairs of hands to achieve effective service delivery including additional staff:

- For design offices which are still in place
- To deal with the extra load associated with travelling and logistics in municipalities which cover large geographical areas
- To deal with the extra load associated with municipalities made up of many dispersed former towns and villages
- To deal with the extra load associated coastal engineering
- To deal with the challenges of delivering and maintaining infrastructure in rugged terrain
- To deal with the increasingly complex and time consuming project management associated with the appointment of inexperienced SMMEs or community based and labour based projects.

(e) The total number

Municipalities need to assess the additional staff required to handle the local peculiarities as described above and add them to the number determined so far. The total number of civil engineering professionals designated as NCE will thus be calculated as follows:

NCE = NU + additional staff to address local peculiarities/demands and design needs

Applying this formula across the board suggests that at least double the number of civil engineering professionals is required in local government in South Africa today i.e. some 2500 to 3000. (For more details on the application of the formulae purchase Numbers and Needs in Local Government from SAICE, 011-805 5947)

Competencies

The project cycle is shown in Figure 3. The competencies required to ensure that appropriate solutions are developed and are adequately operated include the ability to liaise and negotiate with the client (in this case the consumer and/or the politician on behalf of the consumer), plan, design, develop contracts, manage construction and manage operations and maintenance. Such skills are required in each civil engineering discipline in local government i.e. water, sanitation, roads, transport, amenities, housing and solid waste.

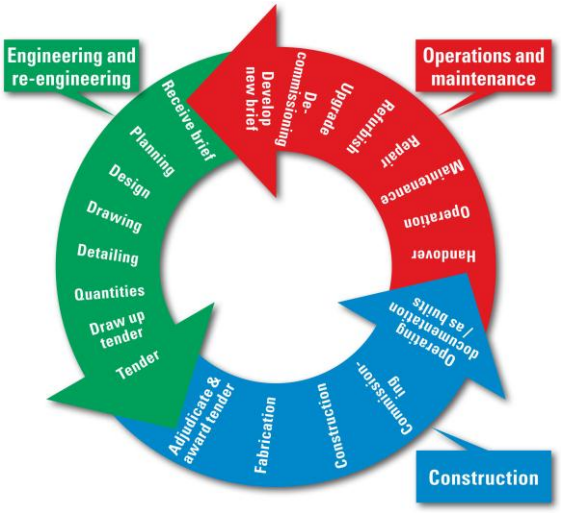

Figure 3: The project cycle

These competencies are the domain of tertiary educated civil engineers, technologists and technicians.

Competency frameworks must be developed to ensure an adequate supply of such skills. Hierarchies of young, mid-career and experienced professionals must work together to address all levels of service delivery. The young to carry out simple tasks from which they will gain sufficient experience to progress to the production phase, the mid-career professionals to take responsibility for day-to-day production, and senior professionals to offer strategic direction, overall management and mentoring of young staff. The skills level of the most senior person per department would be determined in relation to the most complex service offered by that department.

(a) Chief Engineer

In order to re-emphasise that the core business of local government is essentially technical it is recommended that the top technical post be renamed to that of Chief Engineer. This should be held by an experienced civil engineering Pr Eng or Pr Tech Eng, (registration offered in recognition of competence by the Engineering Council of South Africa (ECSA)) to ensure that sound engineering direction is given and decisions are made. Over and above his or her technical qualifications, experience and professional registration, management training and experience would be a prerequisite for a technical person to assume the most senior post.

(b) Job descriptions

Over the years job descriptions have been reworked on the basis that technical knowledge is not critical for the management of any department. They have thus become a cacophony of management duties and generally exclude the technical expertise so vital to manage infrastructure processes and service providers and ensure that sound technical decisions are made. Job descriptions require a complete rewrite to recognise knowledge, qualifications and experience levels required per post.

(c) Junior posts

Few municipalities make provision for junior posts. This precludes those on internship contracts with municipalities from being appointed when they graduate. Developmental career paths should be re-introduced allowing junior staff to proceed towards seniority with the attainment of specific competencies. This will offer a clear career path to the employee, allowing him or her to move upward in one municipality without the need to job hop, and allowing the municipality to benefit from the ever improving skills.

Re-develop appropriate organograms

Departments must re-develop their organograms to encompass all technical functions required in local government from chief engineer to labourer. They should also accommodate junior, middle management and senior posts to allow career pathing as discussed above.

A distinct weakness is the lack of operations and maintenance (O&M) staff. The LGSETA (Local Government Sector Education and Training Authority) reports that in many municipalities there are no labourers or elementary workers, and many municipalities complain of having only one or two artisans left. A study is currently underway to determine the numbers of O&M staff required in relation to households, lengths of pipes, roads etc. Determining the basic skills or building blocks required for development, operations and maintenance will offer guidance for rebuilding or appointing external O&M teams. It is expected that the formulae will be published in a form similar to those outlined in the section ‘The overall numbers required’.

Training

Engineering professionals undergo their tertiary studies at universities and universities of technology and graduate as engineers, technicians or technologists, as shown in Figure 1. A system of workplace training and skills transfer is essential. This demands the availability of experienced supervisors and mentors to support graduates and ensure that they are timeously rotated from one department to another to gain the range of experiences required. Due to the shortage of experienced technical staff in local government, it is critical that retired engineers be harnessed to assist with supervision and skills transfer.

Such efforts should not be limited to civil engineering, but should be extended to all technical fields and professions including electrical engineering, town planning, valuers, building inspectors, laboratory technicians, artisans and operators.

Retention

Retention has become a major challenge worldwide, as the skills shortage becomes more acute. Many inhibitors to retention have been raised, including:

- A frustrating environment where professional judgement is not recognised
- Lack of authority, although technical staff are expected to be responsible and accountable for service delivery
- Excessive bureaucracy and the need to report the same issues to many bodies, each in a different format
- Uncompetitive salaries
- Lack of opportunities and support for developing and retaining professional status
- Contract appointments

There is a desperate need to retain those with knowledge to lead, train, manage service providers and oversee all processes. It is critical that senior job descriptions offer a level of authority and technical departments are once again offered some degree of autonomy. Support staff are needed within technical departments to reduce the bureaucratic burden from those whose technical expertise is so valuable to local government.

When considering salaries and packages, premiums should be paid for tertiary qualifications, professional registration, years of experience in local government and years of service within the municipality. Furthermore professional registration fees should be paid and technical staff should be afforded the opportunity of attending meaningful workshops and courses each year in order to retain their registration through continuing professional development.

Where in-house staff have not been adequately trained towards professional registration, a concerted effort, including the deployment of retired mentors, and rotating staff to allow them to develop the range of competencies required, should be mounted.

The process of appointing on contract must urgently be reviewed. Currently, on expiry of these contracts, staff must reapply for posts. This is a long and uncertain process. As a result staff start looking around and find alternative employment before they are finally notified that they have been reappointed. The decision whether to end a contract should be transparent and include parameters such as past performance, continued need for the specific skills etc. Such reviews should be carried out at least six months before the expiry of the contract. Longer contracts should also be considered.

Attraction

It is essential that technical expertise and competencies be developed and/or attracted, recognised and utilised. As soon as steps are put in place to allow municipal staff to progress in their careers and use their skills to lead development, local government will again become a career of choice.

When carrying out research in 2005, it was found that students studying civil engineering came only from a portion of the country as shown in Figure 4. There were no students studying from many municipalities, which means that these municipalities will be unable to attract civil engineering professionals wishing to return home in the future.

Career guidance, awarding of bursaries, offering experiential, workplace and in-house training should form the basis of training policies to ensure that more young people are attracted into and developed in the sector. Furthermore, meaningful organograms and job descriptions, career progression, more autonomy and authority for delivery departments, and uncoupling the business of local government from the politics of local government must be addressed in order to attract those with experience back into the sector.

The barriers associated with employment equity must also be dismantled to ensure that experienced staff can be appointed. Setting targets in relation to race, gender with respect to commensurate experience and availability per age group would be more sensible.

With these issues addressed, a concerted rebranding campaign will be required before appropriate applicants would even consider responding to local government adverts!

Creating an enabling environment

Many institutional issues have been discussed. Of importance is the need to remove frustrations and bottlenecks to the delivery process. The most important of these relate to supply chain, HR, the demand for reports when systems and processes are not in place, and the lack of authority.

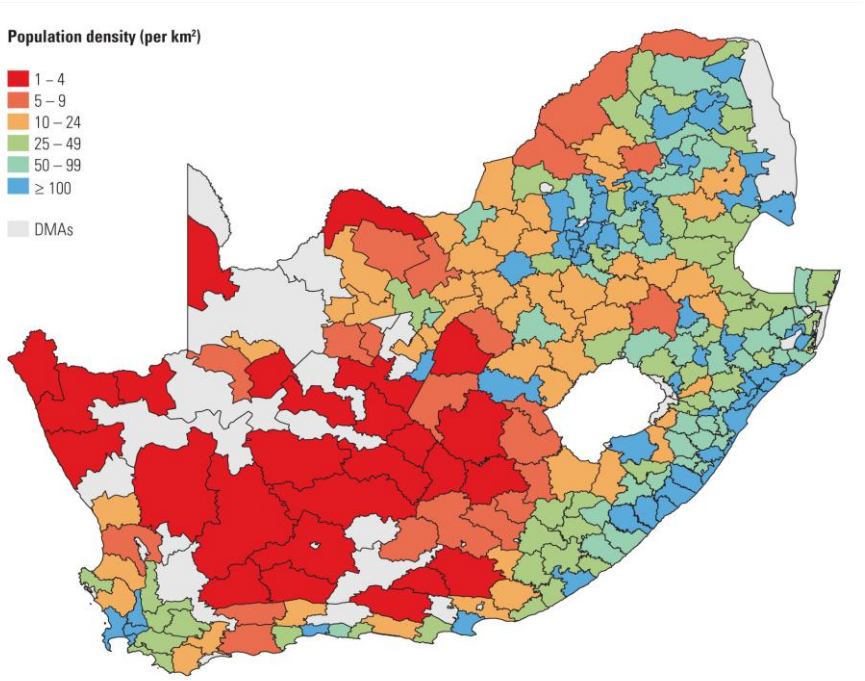

Figure 4: The home towns of students studying civil engineering at universities of technology, November 2005

Supply chain

The arduous process of making purchases and appointing service providers is well known. The three-level decision-making process represented by the Bid, Adjudication and Awards committees presents challenges all the way in terms of skills, cooperation and interference. Municipalities that have been successful have done some or all of the following:

- Transferred the maximum value of delegation to the Executive Director of Infrastructure Services (R10m is allowed)
- Appointed service providers using contracts in place with other organs of state
- Developed service provider rosters – this is acceptable within the supply chain regulations based on competences required
- Set time limits per stage of the process, linked these dates to the project programme and made a person responsible for ensuring that there are no delays
- Developed standard specifications for particular groups of projects
- Grouped similar projects into one tender
- Ensured the Supply Chain Committees are properly constituted with appropriately qualified staff, including staff from the department requiring the product or service
- Used the turnkey model whereby the contractor appoints the consultant, cutting out one complete tender cycle
- In the case of bulk services to be funded by developers, municipalities have not insisted on the bulk contributions being paid into their coffers, but have commissioned developers to develop bulk infrastructure themselves, according to the municipality's specifications and levels of service standards

Human Resources (HR)

The human resource (HR) process, including decision making, has been totally removed from individual technical departments. As a result new employees are generally not selected by those who will be employing or managing them. This disconnect between the employer and those handling the process results in delays and inappropriately qualified or inexperienced staff being appointed in many cases. It is essential that the screening, selection and appointment process reverts to technical departments and HR simply offer the support of advertising, setting up interviews and finalising the contracts. Any interview panel should include professionally registered peer(s) or/and supervisor(s) relating to the position.

Reporting systems

The need to report to many bodies on the same issues in many formats is extremely time consuming and frustrating to those involved. The absence of systems makes such reporting particularly difficult. Simplistic, online, real-time reporting on a select number of KPIs should be all that is required to ensure progress.

Pavement, stormwater, bridge and network management systems, stores control systems, town planning and building plan approval systems, to name but a few, should also be reinstated to improve the efficiency of technical departments. By having real-time information systems, the reporting burden would be a thing of the past, since reports could be generated as a standard by-product of such systems.

In the absence of a sufficient number of skilled staff, comprehensive systems and processes should be in place to assist those remaining with their extraordinary workload. Standardised reporting formats should be developed across all levels of government and should be generated by the various systems developed for local government.

Authority

Support departments, while meant to support line departments, have usurped the authority and undermine the processes which are the domain of technical departments. A review of the Corporate Services model is urgently required.

The need for turnaround strategies

Turnaround strategies need to be developed. Master plans must be updated or developed from scratch, and long-term, holistic views and budgets must be integrated into IDPs to turn them into credible documents. The difference between an IDP and a departmental business plan must be clearly understood. Budgets must be prioritized with service delivery and sustainability in mind and must be based on value for money and life cycle costing.

Organograms must be developed to suit the actual needs of departments, and staff must be appointed and offered workplace training. Career pathing and direction must be given to each employee. Lost data must be located. Systems and operating procedures must be developed, including those related to HR and procurement. Losses must be addressed and appropriate performance must be driven at every level.

Classical management theory advocates the need for dedicated staff to manage such turnaround processes. Experienced, possibly retired staff should be considered. They should work directly with the municipal manager and existing structures to assess, make recommendations and implement the changes required to bolster technical departments, without disrupting their already delicately balanced day-to-day operations.

In some instances this would simply mean assessing existing staff and structures, and advising the municipal manager on the development of junior staff, the appointment of additional permanent staff and promotions required to expand and support existing capacity. In other instances this would be a ‘reinventing’ exercise where the turnaround team will systematically work through every activity, system and process in an entire department to identify gaps with a view to rebuilding systems, procedures and capacity. Once a turnaround plan is agreed it must take precedence in the IDP and Annual Budget.

Conclusions

There is a need to re-engineer local government. More than double the number of civil engineering professionals alone are required to address service delivery. Instead of restructuring, structures should be rebuilt. Instead of politicising appointments, they should be professionalised. Professional judgement should be highly valued. Selection based on professional registration and experience is essential. Where suitably qualified people cannot currently be found, retired staff need to be redeployed to offer their expertise until such time as in-house staff have been adequately trained. This could take several years. A self perpetuating system of developing new young professionals to take over when older experienced staff vacate is essential.

Organograms and the competency framework should form the backbone for staff development and should dictate all HR processes such as advertising, selection, recruitment, performance management, talent management, succession planning, career pathing, training, development, reward and remuneration to select and recruit the right people, identify critical development areas, and promote people timeously.

Budgets must be prioritized with service delivery and sustainability in mind and must be based on value for money and life cycle costing.

Systems and processes should be redeveloped and linked with technical competency profiles to ensure that our national assets are adequately developed, operated and maintained.

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