PART JUNA GLOBAL TRENDS: MONITORING, EVALUATION AND EDUCATION



CHAPTER

THE MONITORING AND EVALUATION OF URBAN PLANS

Planning and managing cities is an increasingly complicated proposition in both developed and developing countries. Challenges such as the provision of safe and affordable housing, a safe and liveable physical environment, improved incomes, potable water and safe sanitation, a decent level of healthcare and education, employment and livelihood opportunities, and social stability, among many other issues – all of which have been addressed by the international community during the last two decades – have already been discussed in some detail in earlier chapters.

Regardless of the context – growth or decline, developed or developing countries – urban planners and decision-makers need to know how best to use limited resources to address the complex urban challenges (and opportunities) that are presented. Urban planning seeks to be *efficient* (make optimal use of resources), *effective* (create desired and meaningful impacts and outcomes), and also seeks to enhance *equity* (of opportunity, rights and power, especially with regard to gender).¹ To achieve these '3Es' of good planning practice, decision-makers need a solid foundation of information and direction that can be provided by urban planning – specifically, the monitoring and evaluation of urban plans.

Urban plan monitoring and evaluation generates many benefits. Continuous monitoring and evaluation of plan relevance, integrity and coherence helps decision-makers to make informed decisions about resource allocations. Monitoring and evaluation can demonstrate whether urban planning has made a difference, whether it has improved (or undermined) the quality of life and well-being of the city's residents, enhanced sustainability, or achieved related goals and objectives.

The objective of this chapter is to review how monitoring and evaluation of urban plans is currently being practised in different regions of the world. The following section provides a brief overview of various types of monitoring and evaluation, and introduces key terms and concepts. The second section examines monitoring and evaluation in the context of current urban planning practice, while the third section considers some caveats and considerations based on this practice. The final section offers concluding remarks and lessons for policy.

TYPES OF MONITORING AND EVALUATION

As noted above, all organizations – public, private and notfor-profit – must contend with considerable challenges in their operating and decision-making environments. For many organizations, especially in the public sector, decisionmakers must somehow plan for and manage increasing demands for services, or provide basic services, while levels of resources are decreasing.

Given the rapid pace and extent of change in local government decision-making environments, there is a need for constant assessment of trends, activities and performance. This has led to increased interest in programme monitoring and evaluation. There are many definitions of the key components of this process (i.e. monitoring, evaluation and related indicators).² In operation, evaluation is an episodic exercise. Monitoring is a continuous process that feeds the evaluation process and signals issues (or opportunities) that must be addressed. Indicators provide the foundation of data and information that directly support monitoring and, ultimately, evaluation (see Box 9.1).

Evaluation and performance measurement are similar but distinctive analytical processes. Performance measurement focuses on programme delivery issues (*efficiency*), whereas evaluation challenges the validity, relevance, outcomes and impacts of a programme, plan or project (*effectiveness*).

Evaluations take many forms. Many international agencies³ require programme evaluation and project evaluations that are associated with development initiatives – for example, the evaluation of urban development, health, economic, social and/or environmental programmes. Project evaluations tend to be narrow in scope, focusing on specific project activities. Programme evaluations are more comprehensive in nature, reflecting the diverse elements (e.g. projects, processes and plans) that can comprise a programme. In each case, the starting point is an existing programme or project. There is general agreement that generic programme evaluation has two main streams: formative evaluation and summative evaluation. These evaluation processes play different yet complementary roles. It is possi-

Continuous monitoring and evaluation of plan relevance, integrity and coherence helps decision-makers to make informed decisions about resource allocations

Performance measurement focuses on programme delivery issues (efficiency), whereas evaluation challenges the validity, relevance, outcomes and impacts of a programme, plan or project (effectiveness)

Box 9.1 Defining 'monitoring', 'evaluation' and 'indicators' in urban planning

Monitoring refers to the ongoing collection and analysis of information about trends, activities and events that could affect the plan's performance. Monitoring can also address whether the plan has been efficiently managed through plan administration processes.

Evaluation tells decision-makers whether, and how effectively, the plan has achieved its intended goals and objectives. It is the measurement of plan performance in terms of the outcomes and impacts compared with intended goals and objectives, and the efficiency with which related resources have been used and the programme has been administered. Three main forms of evaluating urban plans exist:

- I ex ante evaluation (undertaken during plan formulation i.e. before implementation starts);
- 2 formative evaluation (undertaken as part of plan administration i.e. during plan implementation); and
- 3 summative (ex post) evaluation (undertaken normally after implementation of plans).

Indicators provide the quantitative data and/or qualitative information that demonstrate trends and patterns. This information tells us something about phenomena in the decision-making environment. In the process of monitoring, the information and data generated by indicators are checked and updated regularly. When monitored properly, these data and information provide the evidence that is required to support evaluation. The results of plan monitoring and evaluation processes directly affect local government strategic planning and management decisions.

ble to have a highly effective programme that does not make efficient use of resources (and *vice versa*) – hence the need to use both types of evaluation:

- Formative evaluation is conducted early in the plan, project or programme implementation process as a way of assessing and modifying programme delivery. This is largely an efficiency form of evaluation. It is a process refinement tool, typically internal and reflexive in nature, designed to give feedback to decision-makers. This exercise allows adjustments to be made to the direction or performance early on in the life of the policy or programme. Formative evaluations are used to change aspects such as programme administration and programme design. This is usually an internally driven exercise (e.g. by department or agency).
- Summative evaluation (ex post) occurs once a plan, project or programme has been completed and/or it has achieved sufficient maturity to permit an assessment of performance. This type of evaluation examines effectiveness (impacts and outcomes) of programmes. It is often externally driven (e.g. by donor agencies or national government) and it is considered objective. It can be used to make decisions about the future of the intervention or to make improvements in its components and strategies. Summative evaluations demonstrate whether programme goals and objectives have been met as intended; they can also identify unintended as well as intended results.⁴

Monitoring can also take many forms and have diverse applications:

• *Context monitoring* is used by organizations to track trends and forces of change in their operating environ-

ment. Depending upon organizational mandate, this could include monitoring changes to the economy, demography, technology, the environment, sociocultural patterns and political-institutional activities (e.g. policy changes). This is a continuous process that occurs throughout the life of the programme.

- *Process monitoring* is used to determine whether and how the programme is being delivered as proposed. This monitoring approach is used to fine-tune programme administration. Process monitoring supports formative evaluations. Monitoring systems can also be designed to track outputs from programmes to determine whether the programme has generated the desired products; these forms of monitoring support summative evaluations.
- *Outcome monitoring* is a related and important use of monitoring methods. Here, monitoring is used to help determine whether the desired effects of the programme have been realized as intended and framed by the programme's goals and objectives.
- Finally, *impact monitoring* helps programme designers and managers to understand whether the programme and its deliverables have made a difference to the programme's end-users.

The monitoring and evaluation process has been described in many ways, often depending upon the application and sponsoring agency. However, it is possible to identify several core and common stages in monitoring and evaluation design:

- Formulate goals and outcomes.
- Select outcome indicators to monitor.
- Gather baseline information on the current condition.
- Set specific targets to reach and dates.
- Regularly collect data to determine progress.
- Analyse and report the results.⁵

The organization conducting the evaluation must have a supportive culture. In this context, culture refers to the attitudes of staff, as well as demonstrable support from senior management and politicians. However, many organizations are change and risk averse, avoid criticism, and are content with the status quo. In that context, monitoring and evaluation activities would be seen as threatening and would be regarded with suspicion. Organizational culture is thus a very important determinant of success or failure with monitoring and evaluation processes. The situation can be even more complicated when governments struggle with severe resource constraints. In either case, it can be difficult to garner sufficient resources and commitment to support evaluation.

Accordingly, considerable restraint and discipline is required when designing an evaluation. The temptation to overly complicate the evaluation must be resisted. Monitoring and evaluation is a means to an end, which is improvement in programme design and delivery; it should not be treated as simply an abstract intellectual exercise. Expensive and time-consuming evaluations can drain resources and try patience in organizations, especially if the

The organization conducting the evaluation must have a supportive culture

Expensive and time-consuming evaluations can drain resources and try patience in organizations results are negative. Advocates of monitoring and evaluation must be skilled analysts and methodologists; they must also be politically astute and highly strategic communicators. The monitoring and evaluation process must be seen to add value to the organization. It has to be perceived as relevant, credible and important.

Finally, and perhaps most importantly, the monitoring and evaluation approach *must* reflect organizational realities – the constraints and opportunities that are presented. Box 9.2 describes some of the challenges that can be encountered when designing and administering monitoring and evaluation in organizations. The next section explores how these generic evaluation models and methods are used in urban-oriented monitoring and evaluation practice.

CURRENT PRACTICE IN URBAN PROGRAMME AND PLAN EVALUATION

There are lessons to be learned from recent experiences with urban-based applications of monitoring and evaluation models and methods. The use of various types of indicators is well established in many urban planning exercises in both developed and developing countries. However, it is apparent that monitoring and evaluation in the context of urban governance, and as specifically applied to urban plans, is a recent phenomenon. This section describes recent trends and current practice in monitoring and evaluation of urban plans and programmes.

Urban monitoring and evaluation has become part of practice in the more progressive planning departments of cities and regions in developed countries. In many cases, monitoring and evaluation of urban plans reflects an interest in evaluating progress made towards achieving urban sustainability or healthy community goals and objectives. Some of these initiatives have been bottom up, driven by communities and enacted by city planning departments, as in Seattle $(US)^6$ and Hamilton (Canada),⁷ while others have been the product of state legislation and policy, as in New Zealand⁸ and the UK.⁹

In the formerly communist countries of Central and Eastern Europe, however, very little progress has been made so far in embracing monitoring and evaluation as integral parts of the urban planning process. Among the reasons for this is the lack of traditions in monitoring and evaluation. Objective assessments of stated goals were not an important element of communist planning, which was dominated by strict ideological imperatives. This legacy is hard to overcome, especially since the political structure in most such countries is still entrenched in centralized approaches to government and is not conducive to independent reviews of plans and plan implementation.¹⁰

Interest in urban planning applications of monitoring and evaluation – specifically plan evaluation – emerged during the mid 1990s in developed countries, reflecting increasing concerns for efficiency, effectiveness and accessibility, as well as performance and productivity in municipal government. However, the first phase of urban plan monitor-

Box 9.2 Common monitoring and evaluation challenges

- Inadequate understanding of and attention to monitoring and evaluation in project design and subsequently inadequate resource allocation and hierarchical organization of decisionmaking and analysis.
- Lack of commitment to monitoring by project staff and implementing partners. This leads to delays in implementing monitoring systems and to lack of information use by project management.
- Monitoring is seen as an obligation imposed from outside, with project staff mechanically filling in forms for managers and the project managers seeing monitoring only as a form of data collection in the process of writing reports for donors.
- Irrelevant and poor-quality information produced through monitoring that focused on physical and financial aspects and ignores project outreach, effect and impact.
- Almost no attention to the monitoring and evaluation needs and potentials of other stakeholders, such as beneficiaries and community-based and other local cooperating institutions.
- Very few internal project reviews or ongoing evaluations, with adjustments triggered mainly by external evaluations or supervisions.
- Widespread lack of integration and cooperation between project monitoring and evaluation and project management, with no clear, mutually agreed-upon guidelines.
- Monitoring and evaluation documentation that does not address or resolve identified problems.
- Overambitious monitoring systems, with too much being asked in terms of information and methods.
- Poor use of participatory and qualitative monitoring and evaluation methods due to limited capacity and inability to see the need for such information.
- Monitoring and evaluation staff with insufficient relevant skills and experiences, and few
 efforts made to fill the capacity gap.
- Differentiation of monitoring from evaluation activities, with evaluation being contracted out. This leads to monitoring and evaluation not being an integrated system for improvement-oriented critical reflection.

Source: IFAD, 2002

ing and evaluation occurred during the 1960s and early 1970s, coincident with the emergence and early rise of generic programme evaluation theory development. These early approaches – referred to as *ex ante* evaluation – advocated highly rational and technical analyses of urban planning goals and project proposals, including impact analysis, as the urban plan evolved.¹¹ This application of *ex ante* tools distinguishes urban planning applications of monitoring and evaluation from generic programme or project evaluation, which takes an *ex post* or retrospective (summative) and in-process (formative) view of programme performance and impact.

Evaluation of project, policy or programme suitability in plan-making

Ex ante forms of evaluation are commonplace in urban planning practice. Planning organizations dedicate considerable resources to the developing and testing of policy, programme and project alternatives as part of the planmaking cycle. This is in keeping with one of the basic tenets of the traditional (and ubiquitous) rational comprehensive model of urban planning, which provides the decisionmaking framework for much of urban planning practice.

Most long-range plans have policies, programmes and projects that are derived from an evaluation of their fit with

The monitoring and evaluation approach must reflect organizational realities

Monitoring and evaluation in the context of urban governance, and as specifically applied to urban plans, is a recent phenomenon plan or project goals and objectives. Certainly, modern planning practice in most developed countries requires the completion of an array of impact analyses – social, fiscal and environmental – to guide plan decision-making about alternative courses of action. Cost–benefit analysis and cost-effectiveness tools remain the mainstay of evaluation practice in urban planning.¹² Various modelling, forecasting and projection tools (e.g. demographic, economic and environmental) are used to determine likely consequences for housing, infrastructure, recreation, economic development, and health and education, among many other policy realms.

This rigour is a response to the expectations of an increasingly critical public, who demands accountability for plan-making decisions, and an improved understanding of the range of impacts and externalities produced by plans and projects. These tools are often part of elaborate and multifaceted multi-stakeholder plan-making exercises that have become the norm in many developed countries over the past 30 to 40 years. This is especially the case in larger metropolitan regions, such as Paris, Chicago, London and Los Angeles, which have applied sophisticated modelling exercises. In these city-regions, the full range of *ex ante* analytical tools has been employed, particularly to transportation and transit-system planning, and to population forecasts.

These are complicated, highly technical and expertdriven evaluation exercises that very much follow the tradition of rational comprehensive planning, tempered by the inclusion of public outreach and consultation. The use of environmental impact assessments and similar impact analysis techniques in developing countries reflects growing concern with the externalities generated by rapid industrialization and urbanization, and the dictates of international aid-agency funding criteria. However, the dominance of these highly technical and expert-driven approaches is currently being challenged by the increasing importance of strategic planning and inclusive participatory approaches, as shown in Chapters 3 and 5.

The evaluation of plan and programme performance

More recently, there has been greater acceptance of the need to monitor and evaluate the impacts and outcomes generated by urban plans, especially in developed countries. This shift in emphasis can be attributed to the emergence and evolution of sustainable development and the healthy community models over the past 20 years. It also reflects an understanding that the tangible impacts of sustainable development and healthy community programmes, projects and plans are felt at the urban level.

A second group of evaluation methods (formative or *process* evaluation) has been used since the 1990s to assess the efficiency of the planning process and programme administration and delivery. Performance measurement is an integral part of urban planning practice in many jurisdictions in developed countries.¹³ This form of evaluation examines the extent to which outputs comply with the plan's guide-lines – for example, whether subsidiary and associated plans

align with the urban plan – and whether plan administration processes and tools (e.g. development control and zoning) support plan implementation.

A third group of methods falls within the *ex post* (summative or *impact*) evaluation cluster. Here, decisionmakers seek to determine whether, and to what extent, urban plans have achieved their intended goals and objectives (e.g. sustainable forms of development, the public good and equity), and the types of impacts and outcomes that these plans have generated. The summative evaluation process examines the effectiveness of the urban plan, and generates findings that could guide plan revisions and future plan-making processes.

Sophisticated and numerically oriented summative evaluation takes place typically at the national level, less so at the urban scale. This is especially the case in developing countries. Evaluations tend to focus on national economic, education or health issues. These evaluation exercises are *ex post* in nature; they examine the impacts of programmes that often receive international financial support (e.g. from the World Bank, Asia Development Bank, International Fund for Agricultural Development, etc.). Indeed, there is considerable emphasis in developing countries on the selection of relevant indicators that are used to support national-level programme evaluation and performance measurement.

Performance measurement in cities is of interest to agencies such as the World Bank, which recognizes the pivotal role that indicators serve in the effort to achieve economic development, sustainability and healthy communities. UN-Habitat's Urban Indicators Programme and Global Urban Observatory represent the serious efforts that the agency has made to create and institutionalize indicators as a key contributor to enhanced decision-making and, thus, more efficient and effective use of resources.

In developing countries, the most extensive application of monitoring and evaluation has occurred with development programmes that are funded by international agencies, managed by state organizations, and implemented by local authorities. Most of these programmes and projects have an impact at the urban or regional level and represent urban-oriented applications of monitoring and evaluation practice. Programmes cover a wide range of social, economic, environmental and institutional topics that include poverty eradication,¹⁴ urban infrastructure (including water and sanitation), slum upgrading, low-income housing, HIV-AIDS, etc. Examples of monitoring and evaluation practice include the World Bank's *Global Monitoring Report*, World Development Indicators, and Development Impact Evaluation (DIME) initiatives.¹⁵

UN-Habitat's Global Urban Observatory supports citybased monitoring and evaluation capacity-building through its country and city projects on local and national urban observatories. These projects are designed to assist city governments and national authorities, non-governmental organizations (NGOs) and academic institutions to:

 develop their own performance monitoring frameworks for municipal services, local development plans or programmes;

Formative or process evaluation ... has been used since the 1990s to assess the efficiency of the planning process and programme administration and delivery

Summative or impact ... evaluation ... seeks to determine whether, and to what extent, urban plans have achieved their intended goals and objectives ... and the types of impacts and outcomes that these plans have generated

- collect, analyse and report indicators data with a focus on data disaggregation at the sub-city level;
- use performance results for improving urban management and public accountability; and
- establish regular, sustainable data collection processes through local and national urban observatories and personnel training.¹⁶

Most cities want to establish whether and to what extent the end result of policy planning – projects on the ground – reflect the intent of comprehensive plan goals, objectives and policies. The premise is that there should be a high degree of conformity within a planning hierarchy; the highlevel comprehensive plan's intent should be reflected in and guide suburban, subdivision and site planning decisions.

Where lack of conformity of results with plan intentions is an issue, several reasons for this conflict are possible, including lack of clarity in policy design; unrealistic goals and objectives; or inconsistent interpretation of policies. These indicate faults in design or execution. This evaluation of the planning process enables cities to revisit and correct plan content and administrative processes. In most cases, urban plans in developed countries include sections with monitoring and evaluation protocols. There are directions for the use and interpretation of specific indicators. Furthermore, the intent of these indicators is usually clearly expressed. This clarity serves to inform and reassure stakeholders who need to understand what is being evaluated, and how. Regular plan monitoring reports are produced for that purpose. A tangible and applied example of urban plan monitoring – in this case, on land development activity – is provided in Box 9.3.

In developed countries, there is considerable experience with monitoring and summative evaluation of urban-related programmes, especially in transportation, regional economic development, the environment, and many other policy portfolios and programme interventions. National governments and the more progressive sub-national state or provincial governments have typically required evaluation of programme performance. There are also examples of international monitoring and evaluation initiatives - for example, of transnational spatial planning exercises in the European Union.¹⁷ Summative evaluation of high-level urban plans is often mandated by the state. In many jurisdictions, there are national, state or provincial planning laws and policies that require regular evaluation of community plans (also known as development plans, official community plans, official plans, etc.). These evaluations involve a critical and regular assessment of the extent to which an urban plan's goals, objectives and policies have been met.

The intent is to ensure that plans are relevant, strategic, and action oriented. There is also an expectation that regular evaluations will lead to outcomes and impacts that reflect good planning, and ensure compliance with state rules and policies. These evaluation processes are supported by an active monitoring process in which key indicators are tracked and information is assessed.

In New Zealand, the 1991 Resources Management Act mandates regular monitoring and evaluation of urban

Box 9.3 Development permit system: Protecting the natural environment through monitoring

Since 2007, municipal governments in the Province of Ontario, Canada, have used the development permit system to support environmental planning efforts. The development permit system has been designed to allow the imposition of development conditions, such as the monitoring of groundwater quality, the integrity of natural features, and health and safety issues. The system obligates developers to monitor project impacts on an ongoing basis post-development. This anticipated use of monitoring is expected to be an effective means of ensuring proper mitigation interventions.

Source: Ontario, 2008

plans, policy statements and/or planning conditions (e.g. development approvals). New Zealand's extensive experience with monitoring, evaluation and indicators has led to the conclusion that plan monitoring and evaluation can result in more robust and defensible decisions that are supported by better information. Furthermore, monitoring and evaluation can clarify roles and responsibilities, and make expectations of plan performance more realistic. Finally, monitoring and evaluation can enhance mutual understanding of urban planning processes and context among stakeholders, contribute to decision-making transparency and foster collaborative planning.¹⁸

Many types of plans are evaluated with summative methods, such as economic development plans (e.g. Ministry of Economic Development, New Zealand¹⁹), recreation and resource management master plans (e.g. City of Los Angeles, US;²⁰ National River Administration, Israel;²¹ Mekong River Commission for Sustainable Development²²), water and waste management plans (e.g. Region of Waterloo, Ontario, Canada;²³ New York City Department of Environmental Protection, US²⁴), and downtown plans (e.g. the City of San Francisco, US;²⁵ City of Victoria, British Columbia, Canada;²⁶ City of Kitchener, Ontario, Canada²⁷). There are many more examples of urban planning monitoring and evaluation in practice in developed countries. The same principles of monitoring and evaluation apply, but at a different scale of enquiry. In downtown plan monitoring and evaluation, for example, the issues are more immediate and tangible; this can make monitoring and evaluation a comparatively straightforward exercise because many of the issues are geographically contained.

There is less evidence of community/official plan-level monitoring and evaluation in developing countries. There are typically few resources for planning generally, and especially for plan enforcement or monitoring. In countries with reasonable planning capacity, the emphasis is typically on the production of comprehensive land-use plans, master plans and urban design plans, as indicated in Chapter 3. The emphasis is on problem-solving and implementation to meet short-term needs for housing, potable water, waste management, economic development and infrastructure. Urban planning in this context is often adversely affected by serious governance problems caused by political instability, and a sheer lack of social and fiscal capital, technical capacity and institutional instability, among other complex and interconnected challenges. In developed countries, there is considerable experience with monitoring and summative evaluation of urbanrelated programmes

There is less evidence of community/official plan-level monitoring and evaluation in developing countries

Function	Description	Answers the question.
Description	Describe conditions or problems 'What are things Increase general understanding	
Simplification	Simplify complexity; provide a representative picture with significance extending to a larger phenomena of interest	'What's the big picture?'
Measurement	Measure characteristics of quality of life; measure performance activities or services	'How much?'
Irend identificatio	n Establish baseline data; identify trends or patterns; show direction, improvement, disintegration, no change Two types: 1 Past orientation. Indicators are chosen in light of	'How did we do?'
	 their 'historical trend-identification properties' (i.e. showing how dimensions of an identified phenomenon have been changing). Future-orientation. The indicator is a 'forward-looking instrument' used as a predictive forecasting device. 	'Where are we headed?'
Clarification	Clarify analytical issues or long-term goals; highlights What is most areas of concern or improvement important?"	
Communication	Translate data into terms understandable by wide range of users	'How do we explain ?'
Catalyst for action	Stimulate public, stakeholder and political awareness, as well as interest, and will to work towards change	'What next?'

Table 9.1

Key functions of urban planning indicators

Source: Hoernig and Seasons, 2005

Increased transparency, increased sense of ownership ... and increased flexibility to adapt ... are among the main positive outcomes of participatory monitoring and evaluation There is, however, considerable evidence indicating the usefulness of participatory monitoring and evaluation approaches. As discussed in Chapter 5, community participation has proved to be an important element in all parts of the urban planning process, including monitoring and evaluation. Participatory urban appraisal and participatory budgeting,²⁸ in particular, have proved very useful to achieve the '3Es' of good planning practice – efficiency, effectiveness and equity. As evidenced in Chapter 5, increased transparency, increased sense of ownership of the development process itself among the intended beneficiaries/clients, and increased flexibility to adapt by learning from experiences during plan implementation are among the main positive outcomes of participatory monitoring and evaluation. The experience with the use of citizen report cards in Bangalore (India) (see Box 9.4) also shows the effectiveness of involving the users themselves directly in monitoring and evaluation of urban activities.

Although, as noted above, there has been very little progress in embracing monitoring and evaluation as integral parts of the urban planning process in the formerly communist countries of Central and Eastern Europe, there are some indications that this may change in the future. The participation of such transitional countries and city governments in internationally funded programmes and projects has made public institutions in participating countries aware of the need to enforce transparency and accountability in all their actions related to the use of public resources. The active involvement of many Eastern and Central European countries in the European Spatial Planning Observation Network (ESPON) is a clear testimony to the value of such broad initiatives which cut across national boundaries and provide valuable experience for the participating parties.²⁹

Indicators and urban plan evaluation

There is no single unitary set of indicators for urban plan monitoring and evaluation.³⁰ Table 9.1 summarizes key functions of urban planning indicators. Common planningrelated measures could include economic indicators (rates of employment or unemployment; vacancy rates; income per capita; productivity rates); social indicators (e.g. highest level of education; literacy rates; language; age and sex); environmental indicators (e.g. air and water quality; water consumption rates; levels of pollution; amount of recreational land per capita); sustainability indicators and, most recently, indicators of urban creativity. In most cases, numerous potential indicators can be identified for each key issue. There is also the possibility of information overload, and the considerable effort involved in the collection and maintenance of data for indicators; this means that it is essential to be highly strategic in the choice of indicators that support urban plan monitoring and evaluation efforts.

As in the case of programme evaluation, there are many types of urban indicators that could be applied. More recently, equity and gender mainstreaming, in particular have become integral parts of monitoring and evaluation,

Box 9.4 Using citizen report cards as a strategic tool to improve service delivery, Bangalore, India

Bangalore is India's third largest city and is located in the southern part of the country. The city's municipal government was aware of the need to provide and deliver urban services in a more efficient and effective manner. Accordingly, in 1994, a civil society organization – the Public Affairs Centre – prepared 'citizen report cards', which were used to communicate the citizens' perspectives on what they considered dreadful levels of service delivery (e.g. water supply, transport, power, healthcare and transportation).

The report cards were based on random sample surveys, using structured questionnaires, reflecting actual experiences of people with a wide range of public services. Agencies were rated and compared in terms of public satisfaction, corruption and responsiveness. The results of the survey were striking. Almost all public service providers received poor ratings. These Bangalore 'report cards' were sent to the appropriate government agency for action, and the media were alerted.

The public discussion that followed brought the issue of public services out in the open. Civil society organizations demanded action, and, as a result, many public service providers took steps to improve their services. The release of new 'citizen report cards' in 1999 and in 2003 revealed that remarkable improvements had been achieved in the city's public services. Intense public scrutiny had, in fact, been translated into improved levels of service and less corruption.

After more than a decade of monitoring by civil society organizations, the city of Bangalore 'has achieved real progress in improving the quality and cost-effectiveness of its public services'. The Bangalore experience is considered an excellent example of civil society engagement with government authorities. This model has since been used with considerable success elsewhere in India and in other developing nations.

Source: www.capacity.org/en/journal/tools_and_methods/citizen_report_cards_score_in_india

There is no single unitary set of indicators for urban plan monitoring and evaluation

Box 9.5 The Local Urban Observatory for Jinja Municipality, Uganda

Urban-based indicators have considerable potential in the developing world. The city of Jinja (the second largest city in Uganda) is a case in point. The city must contend with complex and interconnected issues, such as poverty, malnutrition, lack of affordable or good-quality housing, and poor health and educational facilities. Since 2000, indicators have been developed to support the city's efforts to understand the nature and extent of these challenges, and to provide the basis for monitoring, evaluation and development of appropriate policy responses.

The indicators were selected to monitor social, economic and environmental issues of importance to the community (e.g. solid waste management, sewage and sanitation). The indicators are based on UN-Habitat's Minimum Urban Data Set (MUDS) with the support of the International Council for Local Environmental Initiatives (ICLEI). It is also important to note that these indicators are the result of a consultative process with local stakeholders; community-based knowledge was an important factor in selecting indicators. The results include consensus about the selected indicators, the engagement of citizens in the assessment of urban issues, and planning exercises that are carried out in partnership with stakeholder groups.

Source: http://ww2.unhabitat.org/programmes/guo/country_and_city_projects.asp

and this has been reflected in the selection and use of indicators. As indicated earlier in this chapter, UN-Habitat, for example, carried out pioneering work at the global level in indicators development through its Urban Indicators Programme.³¹ More recently, UN-Habitat has also launched the Monitoring Urban Inequities Programme, which focuses on access to basic urban services.³² The World Bank has initiated the Global City Indicators project that provides a framework and information clearinghouse on urban indicators.

In many developed countries, more gendered statistics are being produced at the level of central government.³³ However, such statistics tend to be based on existing data sources which historically may not have taken full account of gender or issues of particular concern to women and men. Gender statistics need to relate to policy goals and indicators of success. Gendered indicators are important in that they can help to drive and focus implementation. Unfortunately, gender is often not considered relevant to high-level indicators. The result is that there are no criteria to assess whether policies and projects are going to promote gender equality.³⁴

Performance measurement in urban service delivery is a key policy issue for international development agencies,

and for progressive developing countries. Users of public services can tell governments a lot about the quality and value of the public services provided. Although user feedback is a cost-effective way for public authorities to assess whether its services are reaching all segments of the population, this is not a method that is known, or used, in many developing countries. The continuing poor quality of services is, in part, a consequence of this fact. The city of Bangalore (India) uses the 'report card system' to demonstrate whether and to what extent its services have been delivered (see Box 9.4). In Jinja (Uganda), indicators are used to monitor urban trends and conditions and to evaluate the impact of programme interventions (see Box 9.5).

Urban-oriented indicators support programme and development plan monitoring and evaluation exercises in developing countries – for example, the CDS for Addis Ababa (Ethiopia), which addresses poverty alleviation by integrating this issue within a policy and urban management framework. The goal is to reduce and prevent urban poverty. The objectives are to promote more equitable forms of economic growth, manage the city's resources to enhance sustainability, and empower stakeholders to address key urban development issues.³⁵ Santiago (Chile) has developed

Users of public services can tell governments a lot about the quality and value of the public services provided

Box 9.6 Santiago 2010 Strategic Plan, Chile

Santiago 2010 Strategic Plan was designed to guide urban development in the city. However, the municipality of Santiago realized that ongoing monitoring of plan implementation was essential to the success of the plan. The key components for effective monitoring were identified as:

- the establishment of a system whereby all stakeholders can easily access and exchange information on plan implementation;
- development of methodologies and instruments, such as indicators, for measuring compliance with goals and objectives;
- periodic analysis of local, regional and global conditions; and
- the establishment of mechanisms for engaging local community stakeholders in assessing progress and performance of development planning.

The monitoring and evaluation process that was established as part of the Santiago 2010 Strategic Plan was the first of its kind in Santiago, and it was designed to track progress towards achieving the plan's goals, objectives and development targets.

Since 2000, the city has prepared 73 locally relevant indicators that facilitate the monitoring of the impacts of urban development policy upon urban conditions. These indicators help the city to establish its position relative to other cities, based on the Global Urban Observatory (GUO) network of indicators.

This monitoring and evaluation process design, and indicators development, has strengthened the city's information collection and analysis capacity, and its ability to make informed decisions on urban development. The process has also produced an important side benefit: greater trust among key stakeholders in the community and local government.

Source: http://ww2.unhabitat.org/programmes/guo/country_and_city_projects.asp

Box 9.7 Master Plan for Delhi 2021, India

The Delhi Master Plan has a section that provides considerable detail on the purpose of plan monitoring and evaluation. A monitoring framework has been prepared to:

- evaluate effective implementation of the plan within the planning period (2007–2021);
- ensure that the plan is responsive to changes (e.g. socio-economic);
- help to manage unintended urban development and growth; and
- monitor the relevance and suitability of plan policies.

The city has identified key indicators (environmental, socio-economic, land use and infrastructure) and it advocates community participation in the planning process. The plan also recommends the establishment of a dedicated plan monitoring group with responsibilities shared among several 'management action groups'. Source: Puri, 2007

a monitoring and evaluation system, supported by indicators that assess progress towards achieving the city's urban development goals (see Box 9.6). The city of Delhi (India) has produced a master plan that includes clear directions for plan monitoring and evaluation (see Box 9.7).

CAVEATS AND CONSIDERATIONS IN THE MONITORING AND EVALUATION OF URBAN PLANS

Typically (and quite understandably), the proponents of monitoring and evaluation emphasize its many successes. There is certainly tremendous potential to be realized through the design and implementation of a monitoring and evaluation process, supported by appropriate indicators. However, it is important to note that most urban plan-based monitoring and evaluation has occurred in the cities of developed countries, and this has been a relatively recent phenomenon. These are places that have a reasonable base of finances and technical planning expertise, political stability, sophisticated governance structures, and comparatively manageable rates of urbanization. The scale and type of challenges is significantly different from their counterparts in developing countries.

Furthermore, there has been little critical analysis of these urban plan monitoring and evaluation experiences.

Box 9.8 Challenges in evaluating liveability in Vancouver, Canada

Vancouver is widely regarded as one of the world's most liveable urban areas. It is noted for rejecting freeways and for developing a bustling, 'living first' downtown and an extensive public waterfront. Its collaborative approach to urban development, which features extensive public and stakeholder engagement, has been recognized through a variety of awards and distinctions. While the city of Vancouver has been presented as a leader in urban development, much of the Vancouver region resembles the sprawling, automobile-focused development familiar to most North Americans. Even in the city of Vancouver, major concerns, such as growing income inequality, lack of affordable housing, uncertain economic prospects and a large ecological footprint, have raised questions about whether the Vancouver achievement is sustainable and, indeed, whether all of its citizens find it equally liveable.

There has been little critical analysis of these urban plan monitoring and evaluation experiences While growth was producing great material abundance, many citizens in Vancouver perceived a diminishing quality of life by the 1960s. In 1971, the Greater Vancouver Regional District responded by declaring a new planning purpose. 'Liveability' would become the overarching philosophy for regional planning. Outcomes of the 1970s Liveable Region Plan were to be evaluated by monitoring specific targets of population and job growth, transit expansion and green space protection. However, what liveability meant and, specifically, how to view the relationship between growth and liveability was complicated. How to evaluate liveability emerged as a perplexing question. Various computer models, social indicators and liveability indices were explored but were found, by themselves, to be unsatisfactory. Ultimately, the planners, politicians and citizens had to grapple with the question of what liveability actually meant and how it could be measured. As a result of a lengthy public consultation process, it became clear that liveability was a more or less universal aspiration. Furthermore, the planners rejected the rational planning model where monitoring and evaluating were merely one step in a linear process. Rather, they advanced the view that monitoring and evaluating would be an ongoing deliberative process – a continuous adaptive learning exercise. In this systems approach, complexity and uncertainty were best respected through involving more individuals.

In 2001, the Greater Vancouver Regional District advanced a new framework within which to consider growth management called the Sustainable Region Initiative. With the implementation of this initiative, the focus shifted from liveability to sustainability. A major component of the initiative is the development of a set of indicators that can evaluate progress within the context of the sustainability framework. This process has been informed and guided by work on sustainability indicators, which has been produced by a number of Vancouver-area research organizations that are trying to gain a more comprehensive understanding of the economic, ecological, social and cultural state of the region.

There are important lessons to be learned from the Vancouver experience with the monitoring and evaluation of regional plans. Clarity of terminology, concepts and intents is essential – for example, the meaning of 'liveability' and 'sustainability'. Indicators cannot be selected until there is consensus on the concepts. Plan monitoring and evaluation efforts can be enhanced through extensive and meaningful consultation with diverse publics and stakeholders. Extensive discussion of concepts and indicator validity can enrich and guard against 'groupthink'. However, one group's views on plan performance success could be interpreted by another group as failure. It can be difficult to reach consensus about goals, objectives, policies and their realization 'on the ground'. Monitoring and evaluation can be an important part of an evidence-based decision-making system. It is also an inherently and highly political act in a complex multi-stakeholder planning environment. *Source:* Owens, 2008 This presents an opportunity for comparative primary research on this topic. It also means that there is not yet a good sense of the range of experiences, positive and negative, with urban plan monitoring and evaluation. However, it is possible to learn from the existing body of knowledge and limited experience to identify some common lessons for practice.

A key challenge, and a common argument against introducing plan monitoring and evaluation, is the lack of adequate resources – money, technical services and trained professional staff. This is a real issue in most developing countries and in some developed countries, as well. Many local governments struggle to deliver basic services. In that context, a comprehensive urban planning function is not possible, let alone a sophisticated system of plan monitoring, evaluation and indicators. There can be a temptation to overly complicate plan monitoring and evaluation processes, thus making them too resource and information intensive.

The concept of monitoring and evaluation can be difficult to understand in local governments that face complex energy-sapping urban challenges. There may be no time (or will) to learn about and embrace monitoring and evaluation. Monitoring and evaluation could be regarded (and resented) as an obligation imposed by external sources (e.g. funding agencies or national government) without consideration for local capacity to design and deliver these systems. It may be that monitoring and evaluation is not the highest priority need for a local government, or there is no apparent application for monitoring and evaluation.

Monitoring and evaluation can produce negative as well as positive results. The latter situation is often embraced by local decision-makers, while the former may be ignored, downplayed or even rejected. In the worst case, negative results could present a direct challenge to organizational leadership and its decision-making. Thus, monitoring and evaluation are often looked upon less favourably in such situations. The lack of commitment by decision-makers and staff often jeopardizes the introduction, and constrains the application, of monitoring and evaluation processes. Indeed, lack of political will and bureaucratic inertia explain the slow take-up and application of monitoring and evaluation in many countries (as illustrated in Boxes 9.8 and 9.9).

It is important to ensure that monitoring and evaluation is integrated with other local government corporate planning and decision-making processes and reporting systems. Monitoring and evaluation should operate in conjunction with well-established local government processes, providing the opportunity to inform decisionmaking in a comprehensive, integrated and meaningful manner. Table 9.2 expresses many of the challenges faced when introducing and maintaining plan monitoring and evaluation processes, while Box 9.10 describes key considerations when selecting indicators to support plan monitoring and evaluation. Monitoring and evaluation can produce negative as well as positive results. The latter situation is often embraced by local decision-makers, while the former may be ignored, downplayed or even rejected

Box 9.9 Monitoring and evaluation in China's urban planning system

China is undergoing rapid urbanization, which has increased demands for urban plans to guide city development. Evaluation in urban planning practice, especially in plan implementation, is normally of secondary consideration. In China, plan monitoring and evaluation plays only a minor role in the large number of plans prepared every year. The governments and planners keep preparing plans to catch up with rapid urbanization; normally, they simply repeat what they did before and have no time to improve flawed or outdated practices. The situation is that no matter the results of plan implementation, new plans will be prepared soon.

The types of evaluation are limited; most planning evaluations in China are formative or *ex ante* in nature. The focus is on evaluation of alternative plans, and there have been few attempts to use summative evaluation. However, with the social, economic and public reforms, and the improvement of information systems, increasing attention has been paid to evaluation and monitoring in planning policy-making, in academic research and in practice during the last ten years. It is expected that plan monitoring and evaluation will play more important roles in the future and lead to improvement in planning procedures and management.

The subjects of plan evaluation are broad and include urban transit planning, water resources, environmental impact, land-use development near high-speed railway stations, green space, etc. In China, it is generally the government and developers who carry out planning evaluations. Monitoring focuses on city master plans, scenic reserve plans, historic city plans and detailed plans. Generally speaking, plan monitoring plays only a small role in planning management in China; however, a system of individual 'monitors' now helps to enforce planning monitoring. This monitor programme was first introduced by the Ministry of Housing and Urban–Rural Development in 2006. In the same year, 27 planning monitors were sent to 18 cities for a one-year programme. Monitors are usually experienced retired planners or planning officials. They are familiar with planning regulations, standards and management processes and are good at communicating with different departments. Hence, they can identify most problems in plan implementation and provide measures to solve these in a timely manner. This monitoring system is an innovation used to reinforce the current system. Its implementation has had remarkable effects: planning departments have improved their performance, and many illegal construction sites have been found at an early stage.

Although some progress has been made in planning monitoring, many aspects need to be improved, especially those that involve the public, who remain largely excluded from the planning process. There is an absence of discussion and dialogue about planning performance among both local authorities and professional planners. Most plan evaluation is carried out internally (i.e. within the planning organization, municipality and higher levels of planning departments). In-house staff usually only assess a plan's adherence to its own stated goals and objectives (e.g. plan conformance). There is seldom any involvement of external evaluators, such as community groups. Internal staff, composed of academic experts, officials and professional planners, often have a comprehensive and sound understanding of the Planning Act, regulations, policies, resources and project context. However, the Chinese experience has been that personal bias, as well as organizational politics and culture, can adversely affect the monitoring and evaluation process.

It is important to ensure that monitoring and evaluation is integrated with other local government corporate planning and decision-making processes and reporting systems

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Category	Elements	
Theoretical	What is the role of plans?	
issues	What ability do plans have to effect change?	
	What is the function of the evaluation?	
	What is the role of values?	
	Who are the clients?	
	What are the criteria of success – effectiveness, efficiency, equity?	
Strategic issues	Timing (frequency, point in time)	
	Level (street, neighbourhood, city, region) of measurement/analysis	
	Establishing baseline community conditions	
Definition and	Defining targets, operationalizing problems	
measurement	Capturing plurality of impact, both perception and experience	
issues	Tracking unintended impacts or invisible impacts (what has been protected, what has not been built)	
	Translating policy objectives into measurable indicators (i.e. accessibility, interaction indicators)	
	How to measure people's perception of impact versus the actual impact on their	
	behaviour, as well as benefits and costs to people, thus establishing cause-and-effect relationships of plan policy on people and their behaviour	
	Sphere (social, economic, environmental, spatial) of measurement and analysis	
Data	Data manageability and feasibility of monitoring	
management	Data availability, quality and access	
0	Data analysis and synthesis	
Process issues	Understanding linkages and synergies	
	Establishing a supportive environment for monitoring and evaluation	
	Capturing the impact of policy upon community capacity through participation of a cross-section of community members	
	Ensuring that monitoring and evaluation becomes the basis of critical self-reflection and learning	

Table 9.2

Challenges in monitoring and evaluating urban plans

Source: Hoernig and Seasons, 2005 Central to the discussion in this chapter is the choice of evaluation strategies and their application in urban planning practice. There are many perspectives on this, but also considerable convergence of opinion. The intent is to improve planning practice by examining how planning decisions are made, how the planning and plan-making processes are carried out, and the impacts and outcomes associated with planning interventions. In the urban planning context, evaluations address these key questions:

- Plan formulation (ex ante):
 - How well does the plan evaluate alternatives prior to plan implementation?
 - Does the preferred alternative represent the best fit with the plan's goals and objectives?
- Plan administration (formative):
 - How efficiently is the plan being administered?
 - Is there a need to revise plan review and approval procedures?
 - Are implementation tools aligned with and supportive of the plan?
- Plan impacts (summative, ex post):
 - How well do plan outcomes, results and impacts meet plan objectives?
 - Is the plan implementation process efficient and effective?
 - Have outputs and outcomes justified inputs, and has the plan met policy requirements?³⁶

It is essential that decision-makers have a very clear understanding of what they need to know to make sound evidence-based decisions. This requires a solid rationale for introducing and maintaining a monitoring and evaluation model, clarity about the required information, how the information should be collected and by whom, and the uses of the products of monitoring and evaluation. Box 9.11 provides guidelines to consider when designing an urban plan monitoring and evaluation model.

If poorly designed – for example, if the monitoring and evaluation system is made too complicated – urban planning evaluation can become an administrative burden. Planners and planning departments are usually too busy with conducting applied research, managing stakeholder consultation programmes, and crafting and implementing plans; they often simply do not have the time, energy, training, administrative or political support to monitor and evaluate in a regular and consistent manner. The opposite is generally

Box 9.10 Indicators: Potential and constraints

- Indicators do not drive policy. They play a key role in identifying issues that require attention. Indicators are one of many contributors to
 decision-makers' analytical processes.
- Indicators can be influential under certain conditions. They can indicate the nature and extent of a planning issue. However, their role and message must be considered in the context of the evaluation challenge and integrity of the information. They must be linked to action.
- Indicators' main influence is not primarily after they are developed and published, but rather during the course of their development. The process
 of indicator development and selection, which involves time, trial and error, is an important investment to ensure accuracy, relevance and
 applicability of the indicators. The process of indicator development forces those involved to carefully consider their positions.
- If an indicator is to be useful, it must be clearly associated with a policy or set of possible actions. The application of this knowledge must be clear; the test of relevance is important. Ideally, policies should be developed in unison with supportive indicators.
- Indicators influence most through a collaborative learning process. Planners might facilitate indicator development. Ideally, indicators should be
 selected through a process of collaboration among planners, decision-makers and stakeholders. Indicators have real power when they are
 used and referred to in decision-making processes.
- It matters how the indicators are produced. Expert opinion is a necessary but not sufficient condition for success with indicators. The
 perspectives of stakeholders must be reflected in the indicator development process.
- For indicators to be used there must be not just opportunity, but also a requirement to report and publicly discuss the indicators in conjunction with policy decisions that must be made. There is a need to be sensitive to political currents when developing and using indicators.
- The development of an influential indicator takes time. It could take five to ten years for an indicator to be properly tested, refined and made an integral part of the policy-making process.

true of *ex ante* evaluation methods, which are often required practice elements under state planning legislation (e.g. strategic environmental assessments) and by funding agreements. The objective is to ground monitoring and evaluation in urban planning practice, and to integrate it as part of daily decision-making.

The key is to establish the goals and objectives of the urban plan evaluation exercise – what do decision-makers need to know? This will frame the choice of indicators and the evaluation strategy overall. Since urban planning occurs in a multi-stakeholder environment that is characterized by different values and perceptions about planning issues, there is a need to clarify the meaning and intent of planning terms and basic concepts. There is also an obligation to involve stakeholders in the indicator selection and monitoring process; this can become a mutual learning process that will enhance the potential for buy-in to the urban plan evaluation process and its results. Participatory evaluations are very much the norm in the developing countries' urban programme evaluation exercises.³⁷

In cities that are contemplating the introduction of an urban plan monitoring and evaluation system, it makes sense to select a small, manageable set of urban planning-oriented indicators. Ideally, it would be wise to start with indicators that relate to high-profile and well-established urban planning issues in the community. The point is that the quality and meaning of indicators matters more than the number of indicators. The indicators must explain something in clear, unambiguous terms. They must have significance to and resonate with urban planning stakeholders. They should be relatively straightforward to use and analyse.

Indicators should make optimal use of existing information, with the caveat that ease of access to the usual sources of data may not coincide with the evaluation's information needs. This also means that urban planning organizations need to collect and monitor information that supports evaluation, and that urban plan goals, objectives and policies need to be designed with monitoring and evaluation in mind. Finally, indicators evolve through testing and verification over time.

CONCLUDING REMARKS

Monitoring and evaluation of urban plans has a great deal of potential to improve decision-making capacity, inform planning practice and educate community residents. Local governments need enhanced analytical capacity to anticipate and manage increasingly complex urban challenges, and decision-makers are under pressure to make evidence-based, defensible decisions. Urban planners are therefore expected to create plans and manage urban development that achieves goals of effectiveness, efficiency and equity. Community residents want to know whether urban life is improving or deteriorating. However, there is a need to explore whether and to what extent this potential could be realized. The body of knowledge on monitoring and evaluation practice in urban planning in both developed and developing countries is limited. This calls for primary research that investigates the nature of urban planning practice, generally, and the role of

Box 9.11 Monitoring and evaluation design strategy

- Think about evaluation from an early stage. You cannot evaluate how things have changed and why if you don't have a clear picture of the starting point (the baseline) and of what you are trying to do.
- Build a 'culture' of evaluation get the commitment of everyone involved from projects to partnership board, to gathering information and using it.
- Decide what local work is needed to manage a scheme effectively and to understand its impact. How and when will individual projects be evaluated? What about the scheme as a whole?
- Ensure that evaluation covers the key themes a scheme or project is targeting and that it also looks at how things are being done, overall effectiveness and sustainability.
- Make links between monitoring and evaluation. Competing demands for information can create difficulties, so it is helpful to think about evaluation, as well as more routine monitoring, when you are setting targets and agreeing outputs and indicators.
- Involve the local community. Properly done, evaluation can be an important part of
 accountability to local people, ensuring local voices are heard and providing vital information to feed back to local people. Use evaluation to shape work in progress and to inform
 forward strategies and other local developments.

Source: www.eukn.org/unitedkingdom/themes/Urban_Policy/Economy_knowledge_and_employment/ Research_and_innovation/how-to-evaluate-a-project_1149.html

monitoring and evaluation in that context; assesses the extent to which monitoring and evaluation of urban plans takes place; and evaluates the models and processes that are used in practice. The results of such research would provide the information needed to support interventions by national (or regional) governments, funding agencies, local governments and urban planners. A number of strategies can be identified as decision-makers move to implement urban plan monitoring and evaluation:³⁸

- Ensure that monitoring and evaluation of urban plans is mandated under national and/or state planning legislation. Plan monitoring and evaluation should be considered an essential part of urban planning practice and local government administration. Monitoring and evaluation should be made a legal requirement, supported by relevant legislation (e.g. a planning and development act).
- Support local government urban plan monitoring and evaluation. Legislation is a necessary but insufficient condition for successful urban plan monitoring and evaluation. The state is often in a position to build local government monitoring and evaluation capacity. This could occur by providing financial resources, training programmes, information on best practices, data-sharing and access to technical resources (e.g. GIS).
- Design urban plans that integrate monitoring, evaluation and indicators with goals, objectives and policies. The local government's urban plan should explain the monitoring and evaluation philosophy, strategy and process. A separate chapter on the management of evaluation should be incorporated within urban plans. Ideally, indicators should be attached to each chapter of a plan's narrative content. It should be possible to trace the path from goals and objectives to policies and strategies, and then to related indicators.

Monitoring and evaluation of urban plans has a great deal of potential to improve decisionmaking capacity, inform planning practice and educate community residents

Box 9.12 Guidelines for designing results-based evaluation systems

Step 1: Readiness assessment

Roles and responsibilities for evaluation must be clearly articulated. The urban plan should explain the monitoring and evaluation philosophy, strategy and process. Accordingly, a separate chapter on the management of monitoring and evaluation should be incorporated in municipal plans. Ideally, indicators should be attached to each chapter of a plan's narrative content. Decision-makers should be able to trace the path from goals and objectives to policies and strategies, and then to supportive indicators.

Monitoring and evaluation exercises should involve extensive consultation with, and contributions by, all plan stakeholders, including members of the community at large, neighbourhood residents and special interest groups. There should be opportunities for stakeholders to advise on the design of the plan monitoring and evaluation process, contribute information and insights, and help to maintain the monitoring and evaluation system once implemented.

To be successful, the urban plan needs a champion. At the local government level, this could be the director of the planning department and/or the chief administrative officer, as well as members of council. Monitoring and evaluation of the urban plan will usually be the responsibility of the planning department. Planning staff will need to have the capacity – the skills and knowledge, and resources – to effectively and efficiently carry out the monitoring and evaluation function.

Most important, monitoring and evaluation has to be (and be seen as) an integral part of urban plan decision-making. The corporate and departmental approval process should include consideration of the findings of the monitoring process; the evaluation of plan performance will guide future revisions to the plan. The monitoring and evaluation process must be reasonably straightforward. Local governments must find a way to evaluate plans and planning processes in a manner that meets obligations for reporting and analysis, yet does not overtax planning staff.

Step 2: Select outcomes

Plan outcomes reflect organizational priorities and preferences and stakeholder perspectives. Often, the outcome will correspond to a plan goal statement – for example, a diversified local economy. In this example, the impact of such an outcome could be a workforce that has more choice in employment, more meaningful employment, etc. The ultimate impact of such an outcome could be a healthier individual and, by extension, a healthy community. Urban plan goals and outcomes may be established by the state or local government, preferably through extensive participatory plan-making processes. Some outcomes are unanticipated; these can be positive or negative.

Step 3: Select indicators

Indicators will evolve through application and experience. Indicator selection should reflect stakeholders' interests and concerns. Data collection and analysis issues pervade urban planning practice in many countries. There are often problems with lack of data, the cost of retrieving and analysing data, inconsistent collection or presentation of data, and simply incorrect information. The focus should be on reliability, credibility, accuracy and relevance of information.

It is essential to be very clear about the purpose of the evaluation, the knowledge sought and the role of indicators in that context. Different types of evaluation will call for different monitoring strategies and supportive indicators.

Step 4: Establish baseline data

The baseline serves as a point of reference against which subsequent activities could be assessed. The focus here is on historic trends and current activities. Examples of policy-based baseline indicators could include population statistics, demographic profiles, environmental quality, economic performance, etc.

Step 5: Set targets

Simply put, the urban plan should have fixed targets. These could be outputs, impacts and/or outcomes. Targets can be derived from quantitative and/or qualitative analysis, involving the introduction of political considerations and stakeholder perceptions of reasonable target characteristics.

Step 6: Monitoring

Monitoring has to occur on a regular basis for monitoring to be effective. The monitoring findings must feed directly into the plan evaluation process. Therefore, the needs of the plan evaluation function will drive the type and timing of the monitoring activity.

Urban plan monitoring is typically the responsibility of the planning department. Information collection and analysis could be led by urban planning staff, with contributions from professional staff in other departments. Secondary research can be used for monitoring (e.g. related studies and research), although primary research (such as surveys and censuses) is also commonly used. Qualitative methods can provide insights and context for quantitative analysis. Geo-referenced data provided by geographic information systems (GIS) can be used to track changes in land-use and consumption patterns, and the impacts of urban development on the natural environment.

Step 7: Evaluation

Urban plan evaluation proceeds on the basis of a shared understanding of several elements: plan goals and objectives; outputs, outcomes and impacts; the foundation of indicators; baseline information; and monitoring protocols. Individual project impacts and outcomes could be evalu-

ated (summative evaluation). The efficiency with which plan administration processes are performing could be evaluated (formative evaluation). While plan monitoring is a continuous process, plan evaluation would occur less frequently. Urban plan evaluation is often required every five years, with the intention that the plan's goals, objectives and policies could be fine-tuned to reflect changes in the community's decision-making environment. It would still be advisable to complete an annual evaluation of plan performance and impact, especially in communities affected by considerable change and turbulence (e.g. rapid growth or decline in population and/or economy; shifting national policy foci; updates to national or local government laws).

Step 8: Reporting findings

Communication of urban plan evaluation findings may be required by law, expected by the local government council, and/or requested by external stakeholders. The findings of the monitoring process should be reported to end-users (decision-makers) and plan stakeholders in a structured and accessible manner. Communications strategies could include monthly reports, annual report cards on urban plan progress, regular briefings of council and staff, year-end town hall meetings, etc.

Stage 9: Applications of evaluation

Plan evaluations may be required as a condition of aid funding (e.g. by the World Bank). Evaluations may be mandated by state law and by policy (e.g. by the Planning Act). Evaluations can also be a powerful learning tool and an effective communication mechanism. Planning department staff can use plan and planning process evaluations to improve practice. Decision-makers can use plan evaluations to better understand the impacts and outcomes generated by government investment in urban planning. Stakeholders could use plan evaluations to learn about the planning process, and to determine whether and to what extent their advice was incorporated in the plan and their needs met.

Some types of planning instruments are more amenable to monitoring and evaluation than others. For example, the outcomes and impacts of long-range plans are difficult to evaluate because of the myriad influences and factors that are at play in communities over time. However, site plans, subdivision plans and neighbourhood plans may be more conducive to monitoring and evaluation because these tend to be more tangible types of plans. Similarly, it should be easier to design and manage monitoring and evaluation processes, and indicators, in smaller places and in municipalities where little change occurs over time.

Step 10: Sustaining monitoring and evaluation

Urban plan monitoring and evaluation requires continuous support – political, financial and technical. The local government's culture – the way of doing business and making decisions – has to be supportive. Stakeholders should be consulted. Local government should be comfortable with, and responsive to, demands for accountability and transparency. Monitoring and evaluation has to be respected for it to be carried out effectively. Decision-makers have to see value and a good return on investment when designing monitoring and evaluation systems; they have to understand the consequences of not monitoring and evaluating urban plans. Monitoring and evaluation needs to be a regular, sustained process carried out in the interests of improving plan performance, justifying the planning activity, and addressing the expectations of stakeholders in planning exercises.

Urban plan monitoring and evaluation can be undermined by political opportunism or corruption (which are forces beyond the control of urban planning alone), resource cuts, absence of meaningful links between monitoring and evaluation and plan updates, and indifference or hostility from senior administration. The results of plan evaluations can be negative; they will not always produce positive findings. This could threaten an insecure leadership and certainly challenge those with a vested interest in the status quo. Organizational culture, leadership and patience are virtues; they are also essential when introducing and sustaining urban plan monitoring and evaluation.

- The monitoring and evaluation process must be reasonably straightforward, given the lack of capacity, resources or time that is typical in many urban planning departments. Local governments must find a way to monitor and evaluate plans and planning processes in a manner that meets obligations for reporting and analysis, yet does not overtax planning staff. Specific staff should be assigned responsibility for plan monitoring and evaluation. Roles and responsibilities must be clearly established and reinforced. The purpose and applications of monitoring and evaluation need to be clarified and communicated. The applications and value added of plan monitoring and evaluation must be clearly understood and accepted by stakeholders in the planmaking and implementation processes. This would help to build and maintain an evaluation-supportive culture.
- Allocate resources to policy planning and research functions. It is also important to note that many (urban)

local government planning departments focus on plan delivery and land development planning (plan administration). There is often greater emphasis placed on development planning than on policy planning; a more balanced allocation of resources (e.g. training, technical support and staff positions) is required to support monitoring and evaluation activities.

 Indicators and the monitoring and evaluation system must be simple, easy to understand and workable within existing resource limits. Indicators require validation through testing. The quality of indicators is more important than the number of indicators. There is generally no need to collect and analyse excessive amounts of information. It is essential, however, to be very clear about the purpose of the evaluation, the knowledge sought and the role of indicators in that context. Plan evaluators need to ensure that the data and information collected and analysed have value and relevance.

- Monitoring and evaluation exercises should involve extensive consultation with, and meaningful participation by, plan stakeholders. The technical analysis aspect is a necessary but insufficient condition for plan monitoring and evaluation. Evaluations can play an important educational role for decision-makers and planning staff, as well as community stakeholders. Participation by stakeholders can enhance plan quality and effectiveness through the contribution of insights, intelligence and perspectives that might otherwise not have been captured by the formal plan-making process. Stakeholders can help to evaluate the effectiveness (impacts and outcomes) of a plan, and help to position successive plans by offering critiques of plan performance. Collaborative and participatory approaches to urban plan-making and evaluation are appropriate and encouraged.
- Continue to evaluate proposed policies, programmes and plans. Tools such as cost-benefit analysis, cost-effectiveness analysis and fiscal impact assessment will be especially relevant given the realities of local government resource constraints. In addition, greater interest in performance measurement, return on investment and results-based management principles means that these tools have a strong role in planning practice.

- Use appropriate research methods. Qualitative and quantitative research tools can be used in evaluation practice. Qualitative methods can provide insights and context for quantitative analysis. The methods, including triangulation, must support an evidence-based monitoring and evaluation process.
- Integrate monitoring and evaluation of plan impacts and outcomes in local government urban planning processes. This has to be a regular, sustained process carried out to improve plan performance, to achieve the plan's goals and objectives, and to address the expectations of stakeholders in planning exercises. Ensure that monitoring and evaluation considerations are incorporated within plans from the outset; design plans to be monitored and evaluated. Finally, ensure that plan monitoring processes are clearly and closely linked to, and supportive of, plan evaluation.

Box 9.12 – which is based on the World Bank's results-based evaluation model,³⁹ but has been adapted here for application in urban planning – provides useful guidelines for the design of urban planning monitoring and evaluation systems.

NOTES

- I See Moser, 1993; Hunt and Brouwers, 2003.
- See OECD (2002) for a comprehensive glossary of evaluation terms. See also Scriven, 1991; Weiss, 1998; Rossi et al, 1999; Pal, 2006.
- 3 Such as UN-Habitat, the World Bank, the African Development Bank and the Organisation for Economic Co-operation and Development (OECD).
- 4 Some evaluators consider process evaluation a subset of summative evaluation. Process evaluation traditionally examines how well the services delivered match those that were planned.
- 5 Kusek and Rist, 2003, p23. The World Bank's results-based monitoring and evaluation system offers an excellent example of process design (see Box 9.12).
- 6 See www.sustainableseattle.org/ Programs/IndicatorsIntoAction/.
- 7 See www.myhamilton.ca/ myhamilton/Cityand Government/Projects Initiatives/V2020.

- See www.ccc.govt.nz/LTCCP/ CommunityOutcomes/ Monitoring/AboutMonitoring Programme.asp.
- 9 See www.rtpi.org.uk/ item/1803.
- Hirt and Stanilov, 2008.
 See Hill, 1968; Teitz, 1968; Boyce, 1970; McLoughlin, 1970; Lichfield et al, 1975;.
- See, for example, Bracken, 1981.
- 13 See, for example, the government of Ontario's Municipal Performance Measurement Program, www.mah.gov.on.ca/ Page297.aspx.
- 14 For a discussion of Lima Peru's poverty strategy, see www.citiesalliance.org/ cdsdb.nsf/9ced09a1ac86c4cc85 25683b006abf1a/cd4bf7c94991 d9ea86256cec0078e56e! OpenDocument.
- 15 http://go.worldbank.org/ IFIW42VYV0.
- 16 See http://ww2.unhabitat.org/ programmes/guo/urban_ indicators.asp.
- See www.espon.eu/ mmp/online/website/content/ projects/947/1296/index_ EN.html.

- 18 New Zealand, 2009.
- 19 See www.med.govt.nz/ templates/StandardSummary______13875.aspx
- 20 See www.laparks.org/ environmental/pdf/bellevue/bell evueMMRP.pdf.
- 21 See www.mfa.gov.il/MFA/ MFAArchive/2000_2009/2002/ I/Restoring%20Israel-s%20 Rivers.
- 22 See www.mrcmekong.org/ programmes/bdp.htm.
- 23 See www.region.waterloo.on.ca/ web/Region.nsf/97dfc347666 efede85256e590071a3d4/a 54425a423ced1b18525741000 4d2997!OpenDocument.
- 24 See www.nyc.gov/html/ dep/html/harbor_water/ index.shtml.
- 25 See www.municode.com/ content/4201/14131/HTML/ ch010e.html.
- 26 See www.victoria.ca/ cityhall/departments_plnpln_ downtown.shtml.
- 27 See www.kitchener.ca/ city_hall/departments/ downtown/downtown_ monitoring_report.html.

- 28 See the experience with such processes in Brazil, particularly in the sub-section on 'Participatory budgeting' in Chapter 5.
- 29 Hirt and Stanilov, 2008. See also Box 10.2.
- 30 Wong, 1995, p114.
- See http://ww2.unhabitat.org/ programmes/guo/urban_ indicators.as.
- 32 See http://ww2.unhabitat.org/ programmes/guo/muip.as.
- 33 Breitenbach, 2006.
- 34 Reeves et al, 2009.
- 35 See www.citiesalliance.org/ cdsdb.nsf/47b563a0f7b2695485 25683b006ae379/03d008f4625 7601f86256cec007691d7! OpenDocument.
- 36 See Hill, 1985; Talen, 1996, 1997; Baer, 1997.
- 37 See Chapter 5.
- 38 See, for example, www.eukn.org/ unitedkingdom/themes/ Urban_Policy/Economy_ knowledge_and_employment/ Research_and_innovation/ how-to-evaluate-a-project_ I 149.html; New Zealand, 2009.
- 39 See Kusek and Rist, 2003.

CHAPTER PLANNING EDUCATION

As noted in previous chapters, urban planning is essential to crafting solutions to the pressing urban problems of the 21st century, yet the professional planning practices in place have not always been able to keep pace with the challenges faced by urban areas. This is particularly the case in developing countries. Rapid urbanization in most developing countries has forced planners to respond to escalating demand for housing, infrastructure and services – from both formal and informal sectors. In a globalizing world, cities are increasingly becoming linked to international economic and social networks. At the same time, climate change is posing a whole range of new challenges for cities all around the world. In this situation, it is clear that greater breadth of knowledge among planners is required to plan effectively.¹

Furthermore, while planning in the past was the domain of public-sector authorities in most countries, it is increasingly becoming the focus of action by a wide variety of private, civil society and even informal-sector organizations as well.² Even within government, expansion of the number of authorities involved in specific decisions, coupled with changes in levels of decentralization, have the result that planners work in the midst of conflict and coordination demands that were much less frequent in the past.

In addition to rural–urban migration, cities are also increasingly experiencing the arrival of international migrants. The multicultural nature of many cities requires multicultural planning skills. So, together with changes in technical knowledge essential to successful urban planning, there have been changes in the softer 'people' skills needed to manage the processes of change.³

This chapter examines how urban planning education is addressing these challenges. It also reviews the extent to which planning schools worldwide have the capabilities needed to lead the next generation of urban planning practice in light of the challenges identified above. The first section contains a summary of the historical development of urban planning education at the university level, and identifies the key philosophical and practical debates that framed planning education during the 20th century. The second section presents an initial global inventory of university-level urban planning programmes, reviewing the number and regional distribution of planning schools, characteristics of academic staff, curricular orientations on certain dimensions linked to the development challenges outlined above, as well as linkages to scholarly and professional networks. The third section assesses the capacities of planning schools and suggests directions for positive change. The chapter ends with recommendations aimed at more closely aligning the curricula of planning schools with the needs of practice.

HISTORICAL DEVELOPMENT OF PLANNING EDUCATION

While urban planning practice has ancient roots, it appears that planning education at the university level did not begin until the early 20th century (see Table 10.1). The first such urban planning courses were taught for the benefit of architects, landscape architects and engineers who wished to expand their practices into the city planning domain.

The sub-sections below review the key debates that have framed the development of planning education during the 20th century – namely, design versus policy, rationality versus deliberation, master planning versus development management, and 'one-world' versus context-specific planning education.

Design versus policy

The first university-level urban planning course is widely cited to be the 'civic design' programme at the University of Liverpool. As the name suggests, these early years of planning education were firmly set in the design profession tradition, while drawing on the growing sentiment for scientific applications in government and industry.⁴

School	Planning course offered Offered course in 'civic design' from 1907	
University of Liverpool (UK)		
Lvov Technical University (Poland)	Department of Town Planning established in 1913	
University of Karlsruhe (Germany)	Granted town planning degrees by 1915	
Harvard University (US)	The first North American degree course in 1928	
Saint-Petersburg State University of Architecture and Civil Engineering' (Russia)*	Offered planning courses in its architecture and civil engineering programmes by 1930 and offered a city building degree by 1949	

Greater breadth of knowledge among planners is required to plan effectively

Table 10.1

A selection of early university-level courses in urban planning

Note:* In 1930, known as the Leningrad Institute for Civil Engineers (Soviet Union). Source: Adams and Hodge, 1965; Pawtowski, 1973; Batey, 1985; Frank and Mironowicz, 2008: Hirt and Stanilov, 2008 The growth of urban planning education during the early decades was modest, with only nine programmes established in the US by 1941.⁵ By the end of that decade, however, design was no longer the sole orientation of planning schools, with new schools formed in social science settings, and other schools in design college settings admitting students whose prior work had been other than in a design profession.⁶ The UK was quick to join the adoption of a social science orientation. While some European countries clung to the design paradigm, economic planning flourished as a distinct enterprise in the Soviet Union and Eastern European universities throughout the communist era.⁷

With the decline in dominance of the design orientation and the adoption of applied social science tools, planning schools were free to branch into wider ranges of policy concerns, building regional coverage and adding transportation, housing, social welfare, environmental resource issues and economic development. By the late 1970s, many planning schools covered much of the range of domestic policy matters affecting human settlements.

The broadening of scope was a challenge for urban planning schools. By the mid 1950s, a 'generalist with a specialty' framework⁸ had been articulated for University of Chicago planning students. This framework spread widely and became a key component of US accreditation criteria when those began in 1984. Today, the phrase may be found on the websites and in student manuals of many planning schools worldwide. At the same time, the breadth led inevitably to weakened focus, and there were challenges from practitioners and from scholars in other fields that the boundaries of planning had become too diffuse. Policy scientist Aaron Wildavsky famously asked: 'If planning is everything, maybe it's nothing?'⁹ UK schools moved away from the 'generalist with a specialty' model beginning in the 1970s.¹⁰

The numbers of schools and numbers of students skyrocketed during the 1960s and early 1970s, coinciding with the broadening of scope. This may have been a function of the lower-cost models in social science colleges compared with design colleges, and it may have been driven by workplace demands tied to government planning initiatives in the US, UK and other European countries. In 1975, almost 1500 Master's degrees were awarded by nearly 65 US planning schools, and planning-related instruction became commonplace in departments of geography, urban studies and other social sciences.¹¹ By the late 1970s, there were 211 diploma or specialization programmes in the UK.¹²

The growth was not without problems. Criticism of loss of technical content from the profession was being heard. Commentators tied the skill deficit to the adoption of the social science paradigm and the emphasis on doctoral degree requirements, in contrast to professional practice degrees and experience, for academic staff,¹³ one notably asking: 'Why can't Johnny plan?'¹⁴ Others saw the skill changes as following planning job definition changes, from design consultant to staff policy analyst in government responsible for 'generating information for decisionmakers'.¹⁵ The spread of planning education beyond Europe and North America dates from the late 1940s, with the establishment of two programmes at the South Australian School of Mines and Industries, and the University of Sydney in 1949. Developing country-based planning programmes date from at least the mid 1950s with the establishment of the School of Planning and Architecture in New Delhi (India) in 1955¹⁶ and the planning programme at Ghana's Kumasi College of Arts, Science and Technology in 1958 (see Box 10.5). Initial growth was slow, however, and few developing countries had planning programmes until the 1970s.¹⁷ Many countries, including some in the European periphery, did not have any planning degree programmes until the 1990s.¹⁸

Most often, programmes in developing countries reflect colonial ties, ¹⁹ and it is quite common for developing country planning programmes to be housed in departments of geography, architecture or other related fields.²⁰ In the early years, the challenges of developing country schools were widely discussed as tied to technology transfer and inadequate resources.²¹ The flow of information and technology was largely from North to South.²² More recently, the debate has widened (see below); but it still remains true that information and technology flows are largely unidirectional.²³

There has been a resurgence of design in planning schools in the past decade, driven by the wide interest in new urbanism, walkable communities, urban design, more broadly, and the emphasis in European policy on spatial planning. However, in countries of the Anglo-American and Northern European spheres of influence, this has supplemented, rather than diminished, the social science orientation.²⁴ Ironically, physical design has become the basis of much communication between planners of developed countries and those in countries such as China, where Western policy perspectives may be seen as politically volatile.²⁵

Rationality versus deliberation

The policy analytic framework for planning is probably best understood under the terms of the '*rational planning model*', which originated during the 1930s, but gained widespread use in the mid 1950s. Franklin Roosevelt's 1930s New Deal brain trust included Rexford Tugwell, who was influenced by Keynesian economics, and Frederick Taylor's notions of scientific management. Tugwell championed the notion of planning as a 'fourth power of government'²⁶ and was influential in adopting powerful experiments with planning in city development, housing, water resources and other contexts by the US government.

After World War II, Tugwell joined the University of Chicago's newly created Program in Education and Research in Planning, where his colleagues included Harvey Perloff and Edward Banfield. Perloff, also a Keynesian economist, pushed the faculty to define and systematize core areas of knowledge in planning, perceived as essential to practice. It was the search for this core for the profession that led to the development of a generic model for planning in capitalist democratic countries and incorporation of ideas from various

The numbers of schools and numbers of students skyrocketed during the 1960s and early 1970s

The flow of information and technology was largely from North to South social scientific disciplines, including economics and political science. Banfield's²⁷ new generic model, the 'rational planning model', outlined in Box 10.1, became a guide in the profession and beyond as an approach to problem-solving in the public sphere.²⁸

Reproduced in countless presentations since, these five steps describe a problem-solving framework for complex human enterprises. The model is both self-evident, due to its simplicity, and unachievable, due to its demands on resources and expertise. Banfield recognized complexities, including the elusiveness of the aim of serving the public interest, as well as politics' resistance to scientific analysis.²⁹

For about 20 years, the 'rational planning model' remained the most widely subscribed planning theory. To this day, its logic can be found in the justifications and methodological outlines given in the introductions to most plans. It remains a major underpinning of planning school curricula. Furthermore, it spawned the principal language that urban planners use in methodological discourse.³⁰ Moreover, theoretical and methodological work detailing and extending the model continues. This includes efforts to compare alternative rules for aggregating individual preferences, examination of the implications of risk and uncertainty, and consideration of the impact of new and faster computers on our abilities to ascertain public preferences and completion of the necessary calculations.³¹

By drawing on Keynesian economics and policy studies in political science, the 'rational planning model' led to the incorporation of numerous social scientific concepts within planning offices. It highlighted planning's role in correcting market failures related to externalities, public goods, inequity, transaction costs, market power and the non-existence of markets. Planning borrowed the tools and language of cost-benefit analysis and operations research, including notions of decision criteria, multiple objectives, constraints, shadow pricing, willingness to pay, optimization and minimization.³² Data analysis became more central and with it the growth of computer-based analytic skills.³³

The social unrest of the 1960s in many countries subjected the 'rational planning model' to intense criticism. Radical planners saw the model as a tool used by elites to disenfranchise poor inner-city residents who often lacked education and access to professional consultants and could not argue effectively with the scientific analyses presented as objective by city planning staff, but seen as highly subjective by the residents.³⁴ As shown in Chapters 3 and 5, the legacy of this criticism and the planning profession's responses have been a series of models for greater deliberation in planning, including greater involvement of community residents and other stakeholders in planning processes, such as advocacy planning, citizen participation, empowerment and civic engagement. Each has held sway in planning school curricula for its time, and movement internationally has been uneven. This 'communicative turn' in planning research and practice remains a major force today.³⁵ Yet, at the same time, distrust of indigenous knowledge and fear of decentralized power remains a concern in many countries.³⁶

Advocacy planning calls for the distribution of planning services into low-income minority neighbourhoods

Box 10.1 The five steps of the 'rational planning model'

The five steps comprise the following:

- ends reduction and elaboration ('Desires');
- 2 designs courses of action ('Design');
- 3 comparative evaluation of consequences ('Deduction');
- 4 choice among alternatives ('Decision'); and
- 5 implementation of the chosen alternative ('Deeds').

Source: Stiftel, 2000, pp5–6, citing Banfield, 1955; and Harris, 1967

through a cadre of advocate planners working in the neighbourhoods and representing the interests of the residents in city-level planning processes. Advocacy planning led to significant equity accomplishments, but was criticized for not going far enough, even for taking political wind out of the sails of the poor.³⁷ Critics said planners should help the poor to plan for themselves, rather than try to represent the poor to the city.³⁸

Citizen participation practice enjoyed popularity during the 1960s and 1970s. Planning schools incorporated courses within public participation in an effort to meet the demand, drawing from social psychology and small group processes. Practice results were often mixed, with citizen knowledge helping to make better plans, but real control of planning outcomes retained by traditional interests.³⁹

The problems of advocacy and citizen participation led to various efforts to support stronger planning by the poor, ethnic and other minorities, and other historically disenfranchised stakeholders. By the mid 1990s, the *empowerment* movement was widely practised with the guiding principle that planners have a responsibility to assist those who are affected by plans to develop the skills to actively participate in the creation of the plans.⁴⁰ Thus, planners and planning schools have turned their attention to identifying invisible populations – supporting the factual and analytic needs of ethnic and other minorities and poor people's movements, and skill building among community constituencies more broadly.

During recent years, sociologists and political scientists have recognized declines in social capital and civic engagement and have documented the negative consequences of these trends on democratic realities in many countries.⁴¹ Planning schools have embraced these concerns and have actively sought to promote higher levels of civic engagement through planning processes in the hope of also developing plans that better reflect the needs of the full range of affected stakeholders, and are thus also more likely to be implemented.⁴² Training in group process skills, including facilitation, mediation and conflict resolution, have been widely embraced in planning schools in some countries. More bottom-up community organizing skills have been addressed in many schools. Planning schools in some countries anticipated these challenges, teaching practices tied to so-called social learning approaches as early as the 1970s; but widespread concern with civic engagement did not take place until the 1990s.

The social unrest of the 1960s in many countries subjected the 'rational planning model' to intense criticism

Training in ... facilitation, mediation and conflict resolution ... have been widely embraced in planning schools in some countries

Master planning versus development management

As outlined in Chapter 3, the planning profession's origins were, of course, steeped in the preparation of plans. In the earliest days, these tended to be land-use plans; but by the 1950s the scope had broadened to include related issues, and the practice was often labelled comprehensive, general or master planning. Plan implementation through zoning and other means was important, but was usually seen professionally as subsidiary to the production of the plan itself.⁴³ At the same time, implementation often failed, and so could not be taken for granted.⁴⁴

Evocatively referred to as 'the child that grew up in the cold',⁴⁵ development management in the UK reflects increasing attention to implementation by planners in the latter half of the 20th century. Planning scholars debated the relative merits of long-range plan-making and immediaterange permit review during the 1950s and 1960s, leading to proposals for a *middle-range bridge*⁴⁶ and *mixed scanning*.⁴⁷

By the 1980s, much government planning legislation in developed countries contained detailed provisions for managing development, and *growth management* and *development control* were mainstream parts of planning school curricula, including coursework in zoning and subdivision regulation, impact assessment, site plan review and, later, negotiation.

Today, as shown in Chapter 3, master planning remains problematic in developing countries as a result of high rates of population growth, coupled with limited regulatory/implementation capacity in local governments. Various practice programmes are intended to move planning in developing countries towards greater attentiveness to implementation, including strategic spatial planning, 'new' master plans, integrated development planning and key elements of United Nations-supported programmes such as the Urban Management Programme, the Sustainable Cities Programme, the Localizing Agenda 21 Programme, the Safer Cities Programme and the Disaster and Risk Management Programme.⁴⁸ Beyond the movement towards implementation, some of these innovative programmes have embraced a less comprehensive and therefore more focused vision of good planning, often referred to as strategic planning.⁴⁹

'One-world' versus context-specific planning education

Planning schools traditionally focused on local-scale issues, broadening to metropolitan regional issues in the mid 20th century. The result is that planning education has been tied to the institutional, legal and cultural context of specific countries. When planning schools in the major developed countries found that they were enrolling students from developing countries in significant numbers, they initiated specializations oriented towards practice in the developing country setting. This transition faced several key challenges.

The generalist with a specialty framework of planning education follows the tenet of focus on general theory and method, supplemented with contextual knowledge needed to understand the problems and institutions of specific areas of practice. This contextual knowledge is comparatively easy to relay in a one nation-focused classroom; but when students come from many countries, teaching of context becomes much more difficult. Much planning scholarship assumes the context of democratic governance and market-based economics.⁵⁰ While other work is focused in other contexts, it is highly unusual to find theoretical or method-ological work that systematically addresses implications across all major political and economic systems.⁵¹

In addition, the treatment of international development planning as a specialization, as has been the case in most planning schools located in developed countries, assumes the appropriateness of ideas and tools drawn from developed countries for practice in developing countries. This assumption is often not justified.⁵²

The 'one-world' approach to planning education seeks to bypass these challenges by fundamentally altering planning school curricula to provide internationally relevant training regardless of the anticipated future location of the student's practice. This universalist orientation seeks to broaden the focus of general planning theory and method so that it is relevant and useful everywhere,⁵³ and is expressed in the justification of the Network for European–US Regional and Urban Studies:

> ... the experience and imagination of graduate students preparing for domestic professional practice will be enhanced substantially by studying how planning or policy problems are addressed in other countries under different sets of governmental and planning institutions, norms of professional practice, and ideologies.⁵⁴

The European Union has advanced a multinational orientation in professional education, first through the European Region Action Scheme for the Mobility of University Students (ERASMUS) programme⁵⁵ and, more recently, through action under the Bologna Declaration,⁵⁶ which aims to facilitate cross-border movement of professionals regardless of the country of education.⁵⁷

One-world planning education faces its own challenges, not the least of which is the difficulty of defining meta-frames of reference across a wide range of planning systems that involve divergent socio-cultural and historical backgrounds and value systems.⁵⁸ As planning practice has increasingly emphasized the importance of place and identity, singular models are less convincing.⁵⁹ There is a concern that one-world approaches may overemphasize ideas from developed, particularly Anglo-American countries.⁶⁰ There is also the problem of limited access to scholarship and practice documents produced in many countries in various languages primarily for local or national consumption.⁶¹

The tensions between context-specific and one-world planning education approaches may not be as significant as some believe in that planning education is, in fact, generalizable across many national contexts.⁶² In particular, the cross-national challenge may not be as powerful as the more basic problem of including real-world practical experiences

When planning schools in ... developed countries found that they were enrolling students from developing countries ... they initiated specializations oriented towards practice in the developing country setting

The 'one-world' approach to planning education seeks to ... provide internationally relevant training regardless of the anticipated future location of the student's practice in planning education.⁶³ Indeed, the movement towards internationalization may pull planning academics away from practice in their own countries and further divorce the educational enterprise from practice.⁶⁴

PLANNING SCHOOLS WORLDWIDE⁶⁵

A core of university programmes teach urban and regional planning under the sanction of national or international accreditation agencies to students who intend to formally practice the profession. This group, however, is only the tip of an iceberg of urban and regional planning education, which includes urban and regional planning degree programmes in countries where there is no accreditation system, as well as modules of study focused on planning that are delivered within degree programmes in architecture, economics, engineering, geography, landscape architecture, law, urban studies and other fields. Finally, there are nondegree-granting units within universities and elsewhere that teach urban and regional planning skills to working professionals and/or lay people.

This section attempts to provide an overview of formal urban planning education at the university level worldwide. Thus, it does not present a complete picture of urban planning schools worldwide. Furthermore, due to methodological issues, it may not necessarily be exact. Yet, the survey results provide a unique overview of the regional distribution of planning schools, school characteristics, curricular emphasis, international collaboration between planning schools and accreditation systems.

Regional distribution of planning schools

The inventory produced for this Global Report indicates that there are 550 universities worldwide that offer urban planning degrees.⁶⁶ As can be seen from Table 10.2, more than half of these (320 schools) are located in ten countries, all of which have more than 15 planning schools each. The remaining 220 schools are located in 72 different countries. More than half of the world's countries have no planning schools at all.

Furthermore, the survey reveals that more than half of the world's planning schools (53 per cent) are located in developed countries. When comparing the number of schools with regional populations, it becomes clear that there are major regional imbalances. While the developing countries have less than half of the world's planning schools, they contain more than 80 per cent of the world's population.⁶⁷

While university degrees in planning are relatively less common in Latin America than in developed countries, short-term online and certificate programmes in specialized planning topics are increasingly available. There has been much growth in courses covering geographic information systems, computer-aided design and modelling in the real estate and transportation contexts.⁶⁸

Region/country	Number of schools	Region/country	Number of schools
Developed countries	290	Kenya	3
Albania	2	Lesotho	I
Australia	19	Morocco	I
Austria	3	Mozambique	I
Belgium	3	Nigeria	39
Bulgaria	I	Rwanda	I
Canada	21	South Africa	11
Czech Republic	3	Tanzania	
Denmark	2	Тодо	I
Estonia		Tunisia	I
Finland	3	Uganda	
France	17	Zambia	
Germany	8	Zimbabwe	
Greece	3	Asia and the Pacific	164
Hungary		Bangladesh	
Ireland	3	China	97
Italy	3	China, Hong Kong	
Japan	2	China, Taiwan	3
Latvia		India	15
Lithuania		Indonesia	16
Malta		Iran	
Netherlands	2	Israel	1
New Zealand	5	Lebanon	
Norway	7	Malaysia	4
Poland	12	Pakistan	
Portugal	7	Philippines	
Romania	2	Republic of Korea	7
Russian Federation	8	Saudi Arabia	
Serbia [*]	2	Sri Lanka	1
Slovakia		Thailand	6
Slovenia		Turkey	5
Spain	3	United Arab Emirates	
Sweden	6	Viet Nam	1
Switzerland	2	Latin America and the Caribbean	27
TFYR Macedonia		Argentina	3
United Kingdom	25	Brazil	6
United States of America	88	Chile	2
Developing countries	260	Colombia	2
Africa	69	Guatemala	
Algeria		lamaica	i
Botswana	i	Mexico	9
Egypt	3	Peru	,
Ghana	j	Venezuela	2

Characteristics of planning schools

About two-thirds of the schools award undergraduate degrees in planning; three-quarters award postgraduate professional degrees; and one third award doctoral degrees. The patterns vary considerably by region: while undergraduate degree offerings far outpace postgraduate degrees in Asia, postgraduate degrees are offered by substantially more institutions than undergraduate degrees in the Americas. In Latin America there are very few undergraduate planning programmes as planning education is traditionally linked to schools of architecture. Much of the urban planning undertaken in Latin America is, in fact, undertaken by architects, without formal training as urban planners or urban designers.⁶⁹

In countries where urban planning is primarily taught at the undergraduate level (such as in many countries in

Table 10.2

Urban planning schools inventory (university level), by country

Note:* Includes one planning school in Kosovo.

Source: unpublished Global Planning Education Association Network (GPEAN) survey

There are 550 universities worldwide that offer urban planning degrees

Box 10.2 Planning education in Poland

The development of planning education programmes in Poland is both indicative of the struggles of adjusting planning education and practice from communism to the demands of a market-driven economy, and exceptional in the level of progress achieved over a relative short timespan.

Throughout the communist era, planning was merely a professional specialization of architecture or engineering, emphasizing physical and technical aspects of plan preparation or economics. The first free-standing programme in spatial planning and land economy was established only in 1991. Since then, a range of independent interdisciplinary planning programmes have been established across 17 higher education institutions. During the period of 1991–2008, these institutions have conferred over 3000 planning degrees.

Establishing higher education programmes afresh is a complicated matter, and, in transition countries, rapidly changing policy and legal frameworks can present additional barriers. The planning field faced further adversity in that planning carried (and still carries) negative connotations linked to past experiences with central state management. Hence, the speed and efficiency with which Polish academics established these planning education programmes is all the more remarkable. Key success factors are believed to be academics' ability to draw on a welldeveloped research culture in economic and spatial planning and their fruitful efforts to link with and garner support from established planning schools networks (e.g. AESOP, the Association of European Schools of Planning) and organizations. In addition, with Poland's application for European Union membership, planning became a political and economic factor associated with progress. Knowledge of spatial planning, policy and economy became vital to the successful implementation of pre-accession instruments supporting the transformation of new European Union member countries. This prompted the state to actively encourage universities to develop planning programmes to build capacity.

Tight regulation governing programme provision through Poland's Higher Education Act and extensive state-level guidelines had to be adhered to in order to get programmes established. The guidelines detail everything, from the programme category to the length of programmes. Core subjects, key competencies and teaching methods, as well as basic levels of staffing and academic expertise required to offer programmes are also prescribed.

Planning programmes established after 2002 have all adopted the new three-cycle structure (Bachelor–Masters–Doctorate) mandated by the Bologna Declaration, which seeks to foster comparable degree structures and professional mobility across Europe. Degree lengths vary slightly, based on the type of conferring institutions. This means a Bachelor's degree in planning at non-technical universities requires a minimum of six semesters (three years of study), leading to a professional title of 'licentiate' (*licencjat*); at technical universities, a Bachelor's in planning requires a minimum of seven semesters, leading to the title of 'engineer' (*inżynier*). Planning curricula must offer tuition for a mix of fundamental science subjects, knowledge and skills such as mathematics, statistics, economics, sociology, technical and planning drawing, urban history, introduction to law and a wide range of specialized courses.

Master programmes require a minimum of four semesters for those who hold a Bachelor's degree from a non-technical university, and three semesters for students with a professional title of 'engineer'. Entry to Master's degree studies is open to all students who have completed 60 per cent of all compulsory courses of an undergraduate planning degree. This is relatively easy to achieve for students in environmental studies, geography or architecture.

Since only about half of the curricula at both levels are compulsory, universities have considerable freedom to develop their own specialization. Interestingly, planning programmes were established not only in design and engineering-oriented schools, but were also built up from specializations in economics and environmental sciences. Thus, 4 of 17 universities offer a planning curriculum with a heavy emphasis on economic aspects of planning, 2 institutions offer a strong design focus, while another 2 place a strong emphasis on environmental issues and planning. The remainder of the planning schools offer rather more balanced programmes. Several programmes also offer specializations in European spatial policy and instruments, and rural, heritage and tourism planning.

While the current education provision is comparatively well developed, further improvements are needed. With considerable construction activity, there is a shortage of planners certified to process building permissions. In 2008, the 1200 members of the Chamber of Town Planners – the state-supported body that certifies planners – faced a caseload of over 200,000 applications for residential and commercial buildings projects. Fee levels have, however, stratified chamber membership towards architects, which strains the body's relationship with planning schools and exacerbates the paucity of qualified practitioners.

Planning programmes face issues with marketing as there is no clear profile of planners as an independent profession. Planning is still regarded by many as an obstacle rather than as a means of retaining and improving quality of life and environment. There is no mandatory continued professional development for practitioners, although members of the Chamber of Town Planners are offered seminars and training on legal changes in the Polish planning system and some schools offer postgraduate certificates to help address skills gaps. *Source:* Frank and Mironowicz, 2008

Asia), planning schools generally have a close affiliation with other disciplines, most often architecture, engineering or geography. In other countries (such as Australia), there are signs of a shift from undergraduate to graduate focus for planning education, with Melbourne University, a leading institution, dropping its undergraduate degree and starting a two-year Master's degree programme.

Worldwide, the mean number of academic staff per school is 23, including full- and part-time academic staff,

although caution is necessary in interpreting this statistic since definitions of staff status and even of full- and parttime status vary across institutions and countries. The staffing varies, from the very small in New Zealand – where one planning school has a staff of three – to a school in China with a staff of 132. The latter school graduates about 60 undergraduates and 30 Master's degree students of planning per year.

In terms of the academic credentials of staff, there are

major regional differences. Planning schools in developed countries generally require a doctoral degree of all full-time academic staff members. In contrast, most planning schools in developing countries require a Master's degree only, and some of these schools require only an undergraduate degree for their full-time academic staff. Obviously, this has impacts for the quality of education provided.

There are wide differences in the relative emphases on teaching, research, professional outreach and public service among the universities offering urban and regional planning degrees. Indeed, the debates among these objectives are a cause of tension in many schools.⁷⁰ There are regional differences; but differences among countries within regions and among institutions within countries, as well. Schools in countries that are keen to promote international standing of their universities often find that their universities or governments push them to emphasize research.⁷¹ Schools in countries that are eager to promote development, but do not have adequate planning labour forces (such as in much of Africa and Asia), often attempt to respond to these labour market pressures by emphasizing teaching and outreach. Schools where university budgets are highly limited (such as in Latin America and some smaller European countries) may undertake professional planning project work as a source of supplementary revenue. Moreover, schools differ widely in the relative percentage of full-time and parttime academic staff, with part-time staff often maintaining planning practices as additional work activities outside the university. The resulting diversity among schools with respect to faculty work is substantial.

Curriculum emphasis

As noted above,⁷² urban planning education has moved from a focus on physical design towards an increased focus on policy and social science research. During the last decade, however, there has been a resurgence of design in some schools. While the curricula of a majority of planning schools worldwide combine design and policy approaches to planning, there are some regional variations. Planning schools in China and Mediterranean countries,⁷³ for example, tend to focus on physical design, while those in the UK and US tend to emphasize policy/social science approaches. Box 10.2 illustrates the mix of these two approaches in Poland following the transition towards a market economy.

Curriculum content in the areas of sustainable development, social equity, participatory and deliberative planning and climate change is quite prevalent among planning schools. Quite naturally, its prevalence is tied to the prevalence of policy/social science approaches. In the transitional countries of Eastern Europe (and Greece⁷⁴), however, the lack of integration of design and social science in planning curricula is an impediment to effectively incorporating sustainability in planning in these schools. Despite this, sustainable development enjoys growing prominence in higher education curricula in these countries as well.⁷⁵ In contrast, in many schools in North America, sustainability is a unifying theme to the curriculum. Box 10.3 describes such

Box 10.3 Pioneering of sustainability education: University of British Columbia, Canada

The School of Community and Regional Planning at the University of British Columbia defines its mission as advancing the transition to sustainability through excellence in integrated policy and planning research, professional education and community service. It sees its primary challenge as the need to give practical meaning to the concept of ecologically sustainable social and economic development and to explore local and global paths towards achieving it. It approaches this task through practised interdisciplinarity. The integration of teaching, research, capacity-building and practice is oriented towards providing the knowledge and skills required to ensure the viability of communities and regions in a rapidly evolving world. From the university's perspective, adapting to global ecological change and economic rationalization requires a new generation of planners who are dedicated both to understanding the issues and acting to resolve them in a wide variety of public and private settings.

The university began pioneering work on sustainability before the concept was widely used, as early as the mid 1970s, championing notions of adaptive environmental management. By the time of the 1992 United Nations Conference on Environment and Development (UNCED), held in Rio de Janeiro, Brazil, the university's planning school had established a Centre for Human Settlements and had developed a well-known research programme focused on sustainability ideas and issues. The centre now partners with the university's Institute for Resources, Environment and Sustainability. Current projects include investigations of ecological footprints of countries, and sustainability impact assessments of land development projects. The school is moving towards objectives of addressing sustainability implications for urban governance, potential for using new media to increase public awareness of sustainability issues, and deepening research by examining intrinsic sustainability issues of resilience, infrastructure and public service systems and ecological stocks.

The university's planning school prides itself on the fact that its commitment to sustainability has fostered a climate of productive disagreement and greater intellectual interaction among faculty, as they struggle to resolve the tensions inherent in operationalizing cultural, economic and environmental sustainability.

Source: based on correspondence with Thomas Hutton (Vancouver, Canada), 2009

a circumstance at the University of British Columbia, which holds out sustainability as the key focus of its planning curriculum. On a global level, three-quarters of planning schools teach sustainable development, more than half teach participatory and deliberative planning, a similar number teach social equity, while one third of planning schools teach climate change.

Despite awareness of the importance of gender in planning practice, gender is not a common core part of the syllabus in many urban planning schools.⁷⁶ While, as noted above, about half of the planning schools are teaching social equity issues in their curricula, only a minority of these are specifically teaching gender-related issues. Table 10.3 provides a list of only four programmes worldwide that currently address gender and urban planning.⁷⁷ The absence of gender-specific modules has impacts upon the type of courses delivered and how gender and diversity is discussed in the wider framework of urban planning education.

There are significant regional variations in terms of the relative importance given to technical skills, communicative skills and analytic skills in planning curricula.⁷⁸ Again, the variations are linked to the prevalence of policy/social science approaches, as opposed to design. While planning schools in Asia rate analytical skills as the most important, followed by technical skills and communication skills, the focus varies substantially in Latin America. Overall, in Latin Curriculum content in the areas of sustainable development, social equity, participatory and deliberative planning and climate change is quite prevalent among planning schools

In many schools in North America, sustainability is a unifying theme to the curriculum

Title of course	School	Modules taught
Gender and Equity (compulsory course)	University of Auckland, New Zealand	 Social inclusion/exclusion Gender analysis Planning and spatial equity Gendered space Crime and safer design Social infrastructure assessment tools
Gender and the City	Florida State University, US	 Gender perspectives on the city Globalization Gender and development Gender housing and transport Violence urban space and gender Race and class and sexuality Queer theory implications for gender
Planning and Diversity (taught in 2007)	Virginia Polytechnic and State University, US	 Gender Sexual preferences Culture Participation
International Development and Gender (elective course)	University of Wisconsin, US	 History of gender in development processes Role of international agencies Access to resources Empowerment

Table 10.3

Currently existing university courses on gender and urban planning

Source: Reeves et al, 2009

Box 10.4 Planning education in Europe: Diversity and convergence

Diversity in national approaches is a main characteristic of planning education in Europe. Programme foci and structures, programme size, accreditation requirements, costs and curriculum content all vary across the continent. The types of planning education provided through European universities and institutions may be categorized as follows:

- an independent degree programme;
- · a specialization within a cognate discipline such as architecture, landscape architecture, geography, or economics; and/or
- a second postgraduate degree and certificates of continued professional development for individuals who seek to change careers or specialize further.

This diversity of planning education provision reflects the very different planning traditions and cultures (Newman and Thornley, 1996) that have developed historically and that exist across Europe. Despite the Bologna Declaration, much of this diversity will persist in the foreseeable future as programmes need to offer avenues into the profession that suits the national context. As part of the structural programme changes from long continuous engineering degrees to the two-staged Bachelor/Masters structure, curricula have been reviewed and updated. Furthermore, quality assurance measures are being introduced. These include the establishment of accreditation criteria in national contexts where they did not exist before. Accreditation in Europe is conducted through the Royal Town Planning Institute (UK), the Association for the Promotion of Education and Research in Management and Urbanism (APERAU) (for the French language region), the state (as in Poland), or a number of newly established accreditation associations.

As a very general rule of thumb, planning education in Western and Southern continental European countries is based on an urbanism and urban design tradition, while in the Anglo-Saxon countries there is a distinct social science/economic development orientation of planning. In Eastern Europe, planning existed as a specialism of architecture or economics and only a few countries have so far successfully managed to establish interdisciplinary planning programmes able to teach planning practices and approaches suitable for democratic market economies (Maier, 1994).

With the strengthening of the European Union and the increasing influence of European policy, planning schools have integrated teaching on European Union spatial policy, territorial governance, cohesion, etc. within their curricula. Another key topic is urban renewal and regeneration and dealing with urban shrinkage. Sustainability, urban food and the implications of climate change on rural and urban areas are other emerging themes. The opening of Eastern Europe led to new discourses on the purpose of planning, ranging from ecological, to place-based, market-oriented, communicative, pragmatic, socially responsive or ethical planning, etc. (Gospodini and Skayannis, 2005).

Higher education in European countries is also becoming more competitive, seeking to attract foreign nationals from other European countries and elsewhere. This can have problematic consequences for the curriculum and teaching staff (Peel and Frank, 2008). Especially when catering to students from the least developed countries, it is questionable whether current curricula focused on planning in the European context will provide suitable planning knowledge for these students. Some of the specialist programmes that have been developed, particularly for individuals interested in working in developing countries, may be a better choice for these students. *Source:* Maier, 1994; Newman and Thornley, 1996; Pezzoli and Howe, 2001; Gospodini and Skayannis, 2005; Frank, 2006; Frank and Mironowicz, 2008; Peel and Frank, 2008

America, technical rationalist perspectives are the norm, with skills such as master planning, urban design and econometric modelling more common than those of participation or negotiation.⁷⁹

Concerns have been raised about the fact than students from many developing countries travel to developed countries to obtain their planning degrees. In the US, for example – which is a leading country in the award of planning doctoral degrees – 44 of the approximately 90 doctorates awarded in 2005 went to foreign students. It is suggested that when these planners return home they may be ill prepared to address the planning concerns in their own countries. It appears that many planning schools in developed countries have taken note of such concerns, as many have responded to their significant enrolment of international students by offering specializations in international development planning, or by including various international curriculum components.

European countries show a wide diversity of urban planning approaches. Many disparate approaches have had their origin here and planning education in the region is characterized by a diversity of focus and curriculum contents. Much of this diversity will persist in the foresee-

Box 10.5 Planning education in Ghana: The Nkrumah University of Science and Technology

Planning education in Ghana started in 1958 with the establishment of a planning programme in the School of Architecture, Planning and Building at the Kumasi College of Arts, Science and Technology, now the Kwame Nkrumah University of Science and Technology. The programme entered students for the intermediate examinations of the Royal Town Planning Institute (UK). After passing the examination, students were sent to universities in the UK to obtain full professional qualifications. Even though this practice no longer prevails, staff are still enrolled in PhD programmes abroad. The department is currently the only university department officially recognized to run planning programmes in the country.

The undergraduate planning curriculum combines instruction in physical design with instruction in policy development, while the postgraduate programmes focus on policy development at the macro-level, as well as development planning and management at the grassroots level. At various points in the history of planning education in the country, emphasis has been placed on physical design or policy development, according to prevailing concerns. In the current curriculum, there is an attempt to respond to the issues related to decentralization, the reduction of poverty, and the social, economic and spatial development needs of human settlements within the context of urbanization and the challenges associated with it.

The department currently runs the following academic programmes:

- BSc in Development Planning and in Human Settlement Planning;
- MSc in Development Planning and Management and in Development Policy and Planning;
- MPhil in Planning and Development Studies; and
- PhD in Planning and Development Studies.

With a total student strength of about 700 and 21 staff during the 2007/2008 academic year, the staff-students ratio stands at 1:30 and 1:3 at the undergraduate and postgraduate levels, respectively. With the assistance of partner institutions, the school has been able to undertake successful staff development and student programmes. Although there is no official accreditation programme in place, the Ghana Institute of Planners plays a vital role in curriculum design and the provision of external examiners to moderate the planning programmes offered by the university.

To a large extent, the Department of Planning has been able to respond to the needs of the planning profession in Ghana by producing graduates to meet national development needs. There is, however, an urgent need for urban planners to address the physical development and management of towns and cities. In order to do this effectively, there is a need for adequate resources in terms of teaching and learning materials and space, resources for exchange with other professionals for experience sharing, and practical training of students with professional planning institutions and firms.

The experience from Ghana illustrates that it is possible for planning curricula in developing countries to respond to the contextual issues and paradigm shifts. However, limited resources are seriously influencing the quality of facilities to promote teaching and learning, the orientation of planning to the development context of the country, and the relevance of planning curricula to the developmental needs of the country. The Ghana experience suggests that, for planning education to be effective, there is a need to develop the capacity of planning educators and involve professional associations and bodies in the reshaping of planning curricula. Also important is the need to network with other planning schools in developing countries in order to increase the potential for planning education to respond to the needs of the 21st century.

Source: Inkoom, 2008

able future (see Box 10.4), despite certain factors that, at present, foster a convergence in European higher education, such as the Bologna Declaration, which, by seeking to establish a common European Higher Education Area, stipulates a harmonization of educational structures.⁸⁰

Planning education in Africa is often closely tied to the educational systems of former colonial powers, often with emphasis on master planning, following the British tradition. While technical and physical planning education approaches dominated for many years, this has changed in recent decades, with greater attention being paid to expanded definitions of planners' roles to include economic development and environmental planning, as well as newer participatory and collaborative ideas.⁸¹ At the same time, there are many calls for reform of urban planning education in Africa in order to make planning more responsive to the needs of African peoples, to better prepare planners for work in the private and non-profit sectors, to better confront issues of state power and implementation, to better understand decision processes and capital investment issues, and to be more able to retain academic staff.⁸² Box 10.5 illustrates the efforts of a leading African school to meet national needs while struggling with resource limitations.

School connections with other schools and professional networks

Among the 550 universities worldwide that, according to the GPEAN survey, offer urban planning degrees, 342 are members of at least one or more of the planning school associations that are GPEAN members (see Box 10.6). This leaves 208 schools, or 38 per cent, that are not members of any such planning school association. Regional association coverage is particularly thin in Asia, where only 19 of the 161 planning schools there are members of a regional association. Of the 97 Chinese planning schools, only 1 is a

There are many calls for reform of urban planning education in Africa in order to make planning more responsive to the needs of African peoples

Box 10.6 Global Planning Education Association Network (GPEAN) members

GPEAN members are as follows:

- Association of African Planning Schools (AAPS);
- Association of Collegiate Schools of Planning (US) (ACSP);
- Association of Canadian University Planning Programs (ACUPP);
- Association of European Schools of Planning (AESOP);
- Latin-American Association of Planning Schools (Asociación Latino Americana de Escuelas de Urbanismo y Planeación) (ALEUP);
- National Association of Postgraduate and Research Programmes in Urban and Regional Planning (Brazil) (Associação Nacional de Pós-graduação e Pesquisa em Planejamento Urbano e Regional) (ANPUR);
- Australian and New Zealand Association of Planning Schools (ANZAPS);
- Association for the Promotion of Education and Research in Management and Urbanism (Association pour la Promotion de l'Enseignement et de la Recherche en Aménagement et Urbanisme) (APERAU);*
- Asian Planning Schools Association (APSA).

Note:* APERAU is an international association of French-speaking planning schools with members from Europe, Africa, North America and Asia.

Source: www.gpean.org/

The results of the low incidence of regional network membership of planning schools ... is that academic staff work in relative isolation

Planning schools now exist in at least 82 countries a substantial system of planning education reflecting a total academic staff of more than 13,000 member of the regional association; and of the 16 Indonesian planning schools, only 2 are members. Similarly, in Africa less than half of the planning schools are members of a regional association. Membership rates are also low in countries with economies in transition in Europe. Notable is the absence of any regional association serving the non-French-speaking Middle East.

Cost, language, distance and even political reasons are all contributing factors to non-membership in regional planning school associations. Among the advantages of such membership is that most of these associations convene annual conferences and publish or are affiliated with professional urban planning journals. The results of the low incidence of regional network membership of planning schools in many countries, coupled with the substantial number of schools that do not operate under an accreditation system (see below), is that academic staff work in relative isolation, with limited ability to share curriculum and pedagogic practices, or to move towards consensus about best practices.

While many planning schools in developing countries (and Asian schools, in particular) are not members of regional associations, they may still have other avenues of international contacts. For example, while most planning schools in China are not connected to any other national, regional or international bodies for either their degree programmes or in terms of professional associations, many have established individual ties with schools, programmes and associations within China or in the US, UK or France. Similarly, schools in Indonesia have established ties with Australia; schools in the Republic of Korea have ties with Japan; the planning school in Hong Kong has an established relationship with a UK school; Malaysian planning schools have links with The Netherlands; and schools in Thailand have ties with France, US, Korea and other South-East Asia countries. Many planning schools do not participate in national planning school accreditation systems. Strong accreditation systems exist in major Anglophone countries such as Australia, Canada, New Zealand, the UK and the US, and in countries such as China, Ghana, Hong Kong, Indonesia, Kenya, Malaysia, Nigeria, Pakistan, Rwanda, South Africa, Tanzania and Zimbabwe. But in most countries the planning profession is not well organized and no planning school accreditation system has developed. Among African schools there is considerable interest in better international ties in order to obtain collegial feedback on programmes, but also to obtain evidence of quality, which will be persuasive to university leadership. Several schools in Africa have initiated discussions that are intended to lead to international accreditation through the Royal Town Planning Institute (UK).

Accreditation for planning schools is a contentious issue in some regions, such as Latin America. Efforts to create accreditation are under way in Brazil and Mexico, and various claims are made about the desirability of international accreditation. At the same time, many are reluctant to turn curriculum influence over to external authorities that may have little understanding of national circumstances.⁸³

In many developing countries (such as Brazil⁸⁴), the fact that a large proportion of academic staff have obtained their doctoral degrees at foreign universities in various countries has led to a wide and diverse curriculum orientation. This has also led to the establishment of academic linkages with scholars and institutions abroad. On a more negative note, there is some concern that scholars sent abroad to study may not return.

CAPACITY FOR EDUCATIONAL SUPPORT OF PLANNING PRACTICE

Building on the discussion earlier in this chapter, it is important to consider how the current organization and networking of planning schools assists the revitalization of planning education worldwide, which systems can be put in place to help planning schools and their associations respond to the new challenges, and what the roles of professional associations and other organizations might be in increasing the quality and availability of planning skills.

As noted above, planning schools now exist in at least 82 countries, including at least 45 developing countries. Average staff sizes at these schools are considerable, with every continent having average staff numbers of 8 or higher and most continents enjoying average staff sizes in excess of 20. This is a substantial system of planning education reflecting a total academic staff of more than 13,000. The magnitude of the planning educational system is a recent phenomenon: only 40 years ago the size of the system was a small fraction of what it is today, and even 20 years ago the numbers were much less than they are today.

A planning education system of this size should be capable of meeting the demand for professional planners; but the system is not evenly distributed, curriculum emphases often fall short of the real demands of planning practice in the 21st century, resources are frequently inadequate, staff work assignments do not sufficiently support renewal of staff or the profession, and academic labour market concerns have troubling consequences. Beyond this, the very significant needs for planning training among persons other than professional planners are not being met. Box 10.7 sets out some of the challenges facing planning education in Latin America and the Caribbean. Most, if not all, the challenges identified apply to all other developing

Developing countries are generally underserved by planning schools; only one quarter of all developing countries have such educational facilities. Moreover, the bulk of the planning schools in developing countries are located in a handful of countries. Given the unique circumstances of each country's planning system and the high costs of sending students abroad for higher education, the absence of planning education from so many countries is a compelling problem.

countries and many developed countries as well.

Some countries, primarily developed countries, are increasingly treating higher education as a source of foreign exchange, and in a globalizing world, universities themselves are setting up offshore operations. Liverpool University's civic design programme in China and Carnegie Mellon University's business and computer science programmes in Qatar are two examples of this trend. The flow of human capital resulting from this system can be beneficial to countries lacking strong university resources. But, it can also be damaging, as when individuals in whom a national economy has invested extensively choose to not return to their home countries.

Leading planning schools have recognized the nature of 21st-century urbanization problems and are familiarizing their students with theory and tools related to sustainability, globalization, social equity, climate change and the full range of specializations that are involved in effective plan-making. They view planning as an integrated practice that requires technical, analytic and communicative skills, including participation and conflict resolution in a multicultural context. Unfortunately, not all schools approach these needed perspectives. Many schools treat planning as either a design or a policy practice, rather than both – as is needed. Many are focused on a narrow range of issues tied to legislative planning mandates and forgo consideration of key specializations. Many give short coverage to the softer, people-skill, side of planning, including participation with the full range of stakeholders involved in planning, such as low-income residents, but also understanding and communication with professionals in other fields. Box 10.8 illustrates some of the current professional challenges facing urban planners in Southern Asia. Many of the issues outlined in this box are undoubtedly familiar in other regions where master planning takes precedence over development management in planning education as well.

Furthermore, all too often planning schools lack the academic staff, computers, library materials and studio space to carry out their work effectively. In some developing countries, it is not uncommon for academic staff to be expected to hold second jobs in order to survive on the

Box 10.7 Challenges for planning education in Latin America and the Caribbean

Challenges include:

- keeping pace with the development of new technical expertise (such as geographic information systems, computer-aided design, transportation or real estate modelling, etc.) and with the equipments (hardware, software) required to perform relevant planning analyses;
- expanding negotiation, mediation, conflict resolution and consensus-building skills;
- complementing the rational planning model with participatory, advocate, democratic and collaborative planning models, as needed;
- coordinating multidisciplinary teams effectively with various forms of knowledge and knowledge production;
- addressing metropolitan and regional planning and governance;
- more effective responses to the growing environmental challenges in the region and the world;
- more effective responses to the growing socio-spatial justice challenges in the region;
- forging more collaborative relations with community and governmental organizations involved in planning so that knowledge produced in higher education can improve practice and vice versa; and
- greater emphasis on ethics education so that planning professionals can become more effective agents in combating corruption and other professional and governmental vices. Source: Irazábal, 2008a

salaries paid. Often universities cannot retain academic staff because of competition from industry or overseas institutions. In some countries, the most basic library materials are unavailable and staff resort to reading aloud from key sources so that students may learn from them.

In many institutions, teaching assignments are such that academic staff cannot devote energy to the professional development that is essential if they are to stay current with new developments. Fewer still are afforded the time and support resources necessary to make contributions to advancing the practice of planning, as is necessary if All too often planning schools lack the academic staff, computers, library materials and studio space to carry out their work effectively

Box 10.8 Urban planners being sidelined from urban planning: The case of Southern Asia

Urban planning education in Southern Asia is still based in a tradition dominated by architecture and civic design rather than the multidisciplinary approach adopted in many other countries. The planning education curricula in the region thus continue to lay emphasis on physical design solutions without much consideration of the financial, fiscal and administrative dimensions of urban planning.

Having been moulded through such a limited module, planning graduates are ill equipped in skills that are needed to comprehend and resolve problems rooted in the socio-economic and cultural milieu of the region. This leads to the isolation of the physical planners from mainstream planning and development processes.

For example, planning in India at the national and sub-national levels is geared to sectoral economic planning where physical planners have very little to contribute. At the settlement level, the concerned sectoral departments and development authorities or specialpurpose agencies mostly implement development works. These agencies generally prefer to involve architects and engineers rather than urban planners since the former are more useful for the kind of work that they carry out. The planners' main contribution is thus limited to preparing master plans for towns and cities. But almost all of the few hundred master plans that they have prepared remain largely unimplemented. This further diminishes the creditability of physical planners in the eyes of the decision-makers and the people at large. *Source:* Ansari, 2008

Box 10.9 An international accreditation system for urban planners

Advantages include:

- opportunity for international exchange of ideas, negotiation of standards of excellence, and building of consensus about basic values and criteria;
- raising standards and accountability;
- incentives for programme improvements;
- opportunity for assistance to weaker and poorer institutions and programmes;
- tools (criteria and indicators) for individual institutions to assess themselves and determine the resources needed to achieve excellence; and
- tools for designing quality enhancement programmes.

Potential risks involve:

- unequal dialogue: prevalence of perspectives, values and judgement of more powerful countries, institutions and programmes;
- · loss of programme diversity; and
- increased difficulty of contextualizing the programmes to better address local needs.

Potential challenges include:

- lack of tradition for monitoring and evaluating planning programmes hence, resistance to incorporate those practices on an ongoing basis;
- lack of resources and/or commitment through time (sustainability) for quality enhancement programmes; and
- other competing priorities and opportunity costs.

Ethical concerns are:

- equitable participation of international and national accreditation agents (one suggestion may be to have accreditation boards of 50 per cent each of international advisory members and national judging members);
- accreditation criteria and indicators should be assessed in relation to the mission and resources of the institution evaluated and to the planning context that it should serve;
- assessment should aim at the design of a tailored, realistic quality enhancement programme;
- resources and incentives for promoting enhancement should be facilitated; and
- rewards for accomplished enhancements should be offered.

Source: Irazábal, 2008a

Box 10.10 'Informal' education on gender and planning in Mumbai, India

Between 2003 and 2006, Partners for Urban Knowledge Action and Research (PUKAR) implemented the Gender and Space Project in Mumbai (India). The project was funded by the Indo-Dutch Programme of Alternatives in Development. The research project focused on examining the use and experiences of city space, particularly public space, from a gender perspective. The project also had a 'strong pedagogic component' consisting of short elective courses and workshops.

The courses were available for students at universities and colleges in Mumbai. Workshops and one-off lectures were generally open to the public or held for specific groups working with women in the city. Topics of the courses run included:

- unveiling the city: gender, space and the built environment;
- interrogating the city: gender, space and power;
- gender consciousness and the practice of urban planning; and
- gender, space, youth and urban identity.

Source: Reeves et al, 2009, citing PUKAR, 2005

solutions to today's planning problems are to be found. It is not uncommon for highly trained academic staff to seek posts abroad in order to gain access to facilities and resources that will facilitate such work.

Many schools are not effectively networked within the broader discipline as they are not members of an international planning school association and they do not benefit from the input and questioning of a specialized accreditation system. Conferences and the debates which take place in the publication process are vital to testing the correctness of ideas. In the absence of networks and other forms of peer review, it is difficult to build quality.

Calls for international accreditation are highly problematic. To academic staff labouring in countries where there is no accreditation, the absence of such peer review and quality control can be debilitating. Certainly, where accreditation exists, it can be a powerful force leading to adequate resourcing and thoughtful design of curricula. While the purpose of international accreditation should be the promotion of standards of excellence in planning education and training, many insist that the ability of planning scholars in one country to properly evaluate the actions of planning scholars in another country is often limited. However, a number of the challenges imposed on urban planning through increased globalization – such as global warming, urbanization, ageing, migration, environmental protection and justice, etc. - are increasingly becoming shared rather than unique. Furthermore, new information and communication technologies increasingly facilitate the international exchange of planning information, making planning ideas and practices disseminate more broadly and rapidly. Likewise, transportation technologies facilitate travelling and international consulting for a planning elite, also contributing to knowledge creation and dissemination at a global scale.85

The case for international accreditation of urban planners should thus be further investigated. Perhaps there is a case for the international planning associations organized in GPEAN to partner with the United Nations to develop standards of excellence and ethical procedures for international planning accreditation. There is a valuable precedent for such an effort. The United Nations Department of Economic and Social Affairs (UNDESA) already partnered with the International Association of Schools and Institutes of Administration to produce the *Standards of Excellence for Public Administration Education and Training*.⁸⁶ These standards and the process that led to their creation can offer valuable insights to planning.⁸⁷ Box 10.9 outlines some of the pros and cons relating to introducing an international accreditation system for the urban planning profession.

Perhaps the greater educational challenge facing planning is the need for planning objectives and tools to be understood by architects, engineers, lawyers, administrators and the myriad of citizens and elected officials who must endorse planning interventions and support plans if they are to be adopted and implemented. University incentives in many countries do not support the education of non-degreeseeking students, with the result that planning schools are seldom major contributors to the planning education of allied professionals and lay people. Instead, this challenge is left to planning agencies and other civil society organizations. Frequently, they are not well prepared for the challenge.

As noted above,⁸⁸ there is a glaring absence of gender-related subjects in the urban planning courses taught worldwide. It has been noted that planners who have graduated from a planning course where gender was not in the syllabus, regardless of their gender, often fail to consider gender in planning. This reinforces the need for continuing professional development.⁸⁹ The Royal Town Planning Institute in the UK has worked to advance gender awareness in planning practice during recent years, and has produced tools intended to help planners address genderrelated issues in a practical manner.⁹⁰ Similarly, Box 10.10 provides an example from Mumbai (India) of how the failure of formal planning schools to address gender concerns within their syllabus have been addressed in a more informal manner.⁹¹

CONCLUDING REMARKS

Planning education has grown exponentially and diversified broadly during the last 100 years. Most planning schools have expanded their initial architectural design focus to embrace applied social scientific approaches. Most schools have reconceptualized planning from a rational modernist perspective and have come to emphasize deliberative and participatory processes that advance civic engagement and promote citizen participation. Most have built capacity on issues of plan implementation. Many have moved from geographically specific approaches to integrated one-world approaches. Sustainability and social equity are now fundamental to planning curricula in many schools.

Planning education is conducted at both undergraduate and postgraduate levels, with different countries emphasizing one or the other, but seldom both. Expectations for faculty credentials and faculty work accomplishments vary widely by country and in some instances by institution within a country. Planning schools frequently collaborate with educational units in related fields, often architecture, engineering or geography. There is widespread cross-border movement of planning students, with both positive and negative consequences.

There is considerable need to increase the capacity of planning education in developing and transitional economies. Especially in Asia and Latin America, but also in Africa, new planning schools are needed in countries that have no school or larger countries that have only one. Beyond this, leading universities outside developing countries must increase their capacity to examine and educate for those countries. The one-world approach to planning education holds some promise in helping them to do so. The latter is particularly the case with respect to the worldwide inclusion of gender-related issues in urban planning curricula.⁹²

As a system, planning education has moved vigorously towards theories and tools that respond effectively to the new challenges of 21st-century planning. Diffusion of these innovations has not been complete enough, however. Curriculum reform is needed in many planning schools. Schools which still treat planning only as a design exercise or only as a policy practice need to broaden their approaches. This is most often true among schools in Asia and Eastern Europe; but examples can be found in every region. Schools which teach planning as technical and analytic without incorporating the political and participatory facets of the profession must expand their curricula. Schools which do not yet effectively discuss questions of sustainability, social equity or climate change must do so.

Accreditation systems may be the drivers of such curriculum reform. Countries that do not now have specialized accreditation systems for urban planning may consider putting such systems in place.

Creativity will also be needed to find additional sources of revenue that can help resource-starved institutions in developing countries. Partnerships between universities and planning practice organizations may advance the goals of both, allowing universities to perform useful planning studies for which the practice community may not have capability, while funding students or permitting the purchase of needed equipment. Exchange programmes may be used to give students in one country access to resources not available in their home country. Foundations, learned societies and professional planning organizations should be engaged in the search for funds.

Planning schools need to interact with professional and scholarly networks. Planning school associations in Africa, Asia and Latin America do not effectively sustain communication and growth among their members because school staff cannot travel in sufficient numbers, and because schools cannot afford association membership fees. International development agencies would do well to consider the needs for adequate communication among university urban planning schools. There may be ways to utilize technology for improved communication; the associations themselves should be encouraged to develop these.

Education of allied professionals, elected officials and members of the lay public is a great unfilled need. This need cannot be filled by universities alone, although universities should expand their efforts in these areas. Beyond this, training programmes aimed at specific segments should be undertaken by planning professional associations and by international development agencies. Systems for sharing materials used in such training programmes would be valuable, so that similar organizations in other countries do not have to reinvent content and delivery tools. There is a glaring absence of genderrelated subjects in the urban planning courses taught worldwide

Planning schools need to interact with professional and scholarly networks

NOTES

- I Friedmann, 2005a; Irazábal, 2008a
- 2 See Chapters 3 and 5.
- 3 Hague et al, 2006; Graham and Marvin, 2001 4 Krueckeberg, 1985.
- 5
- American Society of Planning Officials, 1941, pp263ff.
- 6 Nocks, 1974; Birch, 1980; Sarbib, 1983; Krueckeberg, 1985
- 7 Hirt and Stanilov, 2008, p83.
- 8 Perloff, 1957
- Wildavsky, 1973; Alterman and 9
- Macrae, 1983.
- 10 Healey, 1980.
- П Krueckeberg, 1985, DD427-429.
- Healey and Samuels, 1981. 12
- 13 Alonso, 1986.
- 14 l evin, 1976
- 15 Hemmens, 1988, p87.
- 16 Ansari, 2008
- Bell and Packard, 1976; Stiftel 17 and Watson, 2005.
- 18 Gospodini and Skayannis, 2005. 19 Mohammed, 2001; Diaw et al,
- 2002:Yuen, 2008
- Yuen, 2008; Irazábal, 2008a. 20 21
- Rodwin, 1980. 22 Irazábal, 2008a
- 23 Stiftel et al, 2006a; Stiftel and
- Mukhopadhyay, 2007. 24
- Grant, 2005. 25
- Abramson, 2005, p92.
- Tugwell, 1939. 26 27
- Banfield, 1955, 1959, 28
- Sarbib, 1983; Garcia, 1993. Stiftel, 2000
- 29 30
- Dalton, 1986; Baum, 1996. 31 Klosterman, 1994; Fischoff, 1996; Sager, 1997.
- 32 Klosterman, 1985.
- 33 Batty, 1984.
- Goodman, 1971; Grabow and 34 Heskin, 1973.
- 35 Allmendinger and Tewdwrlones, 2002.
- Irazábal, 2008a 36
- 37 Davidoff, 1965

- 38 Mazziotti, 1974; Needleman and Needleman, 1974.
- Arnstein, 1969; Mazmanian and 39 Nienaber, 1979
- Friedmann, 1992; Khosa, 2001; 40 Lyons, 2001. Putnam, 2000. 41
- 42 Vidal et al, 2004.
- 43 UNCHS. 1995
- Meyerson and Banfield, 1955; 44 Rabinovitz, 1969; Altshuler, 1966
- 45 Crow, 1996
- 46 Meyerson, 1956
- 47 Etzioni, 1967
- Arimah and Adeagbo, 2000; 48 Watson, 2007
- 49 Albrechts et al, 2003
- 50 Gunder and Fookes, 1997.
- Frank, 2006, pp19–20. 51
- Qadeer, 1988; Sanyal, 1989. 52
- 53 Frank, 2006; Sanyal, 1989.
- 54 Goldstein et al, 2006, p2.
- 55 Williams, 1989.
- 56 Bologna Declaration, http://ec.europa.eu/education/ policies/educ/bologna/bologna. pdf
- Davoudi and Ellison, 2006; Confederation of EU Rectors' Conferences and the Association of European Universities, 1999.
- 58 Qadeer, 1986; Burayidi, 1993.
- Yuen, 2008, p97. 59
- 60 Kunzmann, 2004.
- Stiftel et al, 2006b; Stiftel and 61 Mukhopadhyay, 2007.
- 62 Hinojosa et al, 1992.
- 63 Afshar, 2001.
- 64 Kunzmann, 2004.
- Major parts of this section are 65 based on a survey undertaken for this report by the Global Planning Education Association Network (GPEAN), an affiliation of nine planning school associations worldwide (see Box 10.6). The objective was to develop an inventory of university-based

programmes that have the word 'planning', or its equivalent, in the title. However, this was not straightforward, especially in Francophone and Latin American countries where the usual title of 'urbanism' or an equivalent reflects a cross between the Anglophone usages of urban planning and of urban studies. As planning in many countries often takes place in schools of architecture, economics, geography or law, the current survey underestimates the number of planning schools. For example, while the survey indicates that there are only six planning schools in Brazil, the membership of Brazil's National Association of Postgraduate and Research Programmes in Urban and Regional Planning (ANPUR) includes 36 schools. Likewise, the GPEAN survey identified only 12 planning schools in Poland, while a case study prepared for this report identified 17 such schools (see Box 10.5).

- See also Stiftel, 2009. 66
- 67 Although Africa seems to do relatively well in this comparison with a similar proportion of planning schools and population, the bulk of planning schools are located in Nigeria (39 schools) and South Africa (11 schools). The remainder of Africa have only 3.4 per cent of the planning schools, compared to 11.8 per cent of the world's population.
- 68 See also note 65 above.
- Irazábal, 2008a. 69
- 70 Stiftel et al. 2009
 - 71 This is frequently the case for many larger European countries, as well as for Australia, Canada, New Zealand and the US. The Research Assessment

Exercise, an effort to rank university programmes based on research impact, has been a major tool for the UK government to push its universities to greater research emphasis and has more recently been copied elsewhere, such as in The Netherlands and Hong Kong.

- 72 See earlier sub-section on 'Design versus policy'.
- 73 Including Italy, Greece, Spain and North African countries.
- Gospodini and Skayannis, 2005. 74
- 75 Hirt and Stanilov, 2008.
- Reeves et al, 2009. 76
- 77 According to Reeves et al (2009), these are the only currently existing programmes of this nature worldwide.
- For the purposes of the 78 GPEAN survey, statistics and geographic information systems (GIS) were given as illustrations of technical skills; working with the public and with elected officials and organizing workshops as examples of communicative skills, and policy analysis, costbenefit analysis, population projections and project prioritization methods as examples of analytic skills.
- 79 Irazábal, 2008a.
- See Box 10.2. 80
- 81 Diaw et al, 2002.
- 82 Oranje, 2008; Mabin and Todes, 2008; Kusiima, 2008; Nnkya and Lupala, 2008.
- Irazábal, 2008a. 83
- 84 Irazábal, 2008a.
- 85 Irazábal, 2008a
- 86 UNDESA and IASIA, 2008.
- Irazábal, 2008a. 87
- 88 See earlier sub-section on 'Curriculum emphasis'.
- 89 Reeves et al. 2009.
- 90 RTPI, 2003, 2007.
- Reeves et al, 2009. 91
- 92 Reeves et al. 2009.