# **Overview of Strengths, Weaknesses and Potential Impacts of Different Planning Systems—With Cases of Different Countries**

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**Abstract:** This paper focuses on different types of planning systems and the strengths, weaknesses and potential impacts of these planning systems. Planning systems bring new patterns of mobility to cities, which do not only have a positive impact on urban systems, but may also have some negative effects and even potential impacts on future development. The planning systems applied vary from country to country. This paper examines the differences between the different planning frameworks in a country-specific context, with an eye to the specific application of planning systems in national development.

Keywords: Planning systems; Discretionary planning; Regulatory planning; Hybrid planning

# 1. Introduction

Planning can be a generic term; it involves a variety of approaches and can be applied to a variety of situations and disciplines. Planning has been defined in different ways over time. The general view is that planning is a political act to compensate for market failures, to ensure spatial order and to avoid spatial chaos due to the market. It has also been argued that planning is a way to help increase the effectiveness of industrial and commercial activities without violating social equity<sup>[1]</sup>. The following section will focus on the planning system of urban design.

Different countries have different legal systems, administrative systems and land ownership systems, resulting in the existence of a variety of planning systems, most notably three different planning systems: regulatory planning, discretionary planning and hybrid planning. Each of these three planning systems has its own advantages and disadvantages. They are relatively mature planning systems that are currently widely used and they have had a profound impact on the planning outcomes of different countries. Planning is the government's tool for controlling and regulating land use in accordance with the legal system. The planning system directly determines or influences the content and procedures of the planning permission required for land development and construction projects<sup>[2]</sup>. When understanding and studying the planning system, one can appreciate the differences in power control and political connotations between countries. But as a whole, economic globalisation has brought more uncertainty to the development of countries around the world. Under these conditions, planning has had to become sharper and more flexible in order to promote the economic and social development of the region. The holistic (integrated) and rational approach to planning that was developed in the 1950s and 1960s is now difficult to adapt to the context of economic globalisation. There is an undeniable need for planning systems that have the capacity to react quickly and to make decisions at short notice<sup>[3]</sup>. The three planning systems are explained and analysed in the paper, using the UK, Japan and Bangladesh as examples respectively. In the face of economic globalisation and increasing competition, development and planning will face more uncertainty. The hybrid planning system is the most commonly used planning system, which can better adapt to different countries' conditions and make reasonable future urban planning with a balance of certainty and flexibility.

# 2. Literature Review

Planning systems have many broad common features, including: legal frameworks, plans, regulatory systems, political decision makers and appeal processes<sup>[4]</sup>. Urban planning systems necessarily involve different levels of government agencies and sometimes even private institutions. Different countries have different departments and levels of government involved due to different planning systems. In the Western world, the planning systems that have evolved to guide land use planning are often divided into

regulatory zoning systems or discretionary systems, and the conflict between certainty and flexibility in urban planning has always existed in the form of planning systems. In the urban planning process, planners and planning theorists may pay lip service to the need for flexibility. But the very real need for planning organisation is served by its opposite, a trend that can be found embodied in practice and planning theory<sup>[5]</sup>.

National legal systems, administrative systems and land ownership are influenced by a variety of factors, and planning systems around the world have their own individual characteristics, and there are essentially no identical planning systems. It has to be acknowledged, however, that in much of the literature on planning systems there is a recurring dichotomy between 'compliance' (regulatory certainty through zoning) and 'implementation' (strategic flexibility through liberal planning) systems<sup>[6]</sup>. In reality, many planning systems exhibit a combination of characteristics that fall between regulatory zoning and discretionary systems. Hybrid planning systems have been developed to combine flexibility and certainty at the same time<sup>[7]</sup>, and there are even hybrid plans that combine these two planning systems. However, much of the literature has limitations, as there are also forms of planning with different orientations and characteristics in different national contexts and under both types of planning systems. For example, there are four types of controlled planning in continental Europe<sup>[8]</sup>, the first of which is represented by the Netherlands and France. This system is more systematic in terms of organisation and hierarchy of planning. The second type of planning system, represented by Italy and Greece, is more decentralised and relatively unsystematic, with the whole system being more complex. The third type is the Spanish and Belgian system. This system places more emphasis on regionalism and regional coordination and planning. The fourth type is represented by the German planning system. The German planning system is permeated with legal procedures, and the planning system contains a complex codified content as well as strict planning regulations.

Most of the literature, however, only provides an overview of the discretionary and control planning system as a whole, with examples of one or both, which is not comprehensive and has limitations. Since the introduction of the concept of 'strategic planning', 'near-term planning' has been promoted as an approach to action planning at the master plan level. At the same time, the "urban management", "regional spatial governance", "public participation" and "inclusive growth" have been promoted. The policy of urban management, regional spatial governance, public participation, smart growth, sustainable development and so on, is being promoted. "The concept of policy planning (planning policy guidance) is gradually gaining importance and has been integrated into regional and urban master plans. This has not only brought innovation to planning theory, but also gradually led urban construction to a rational track. While the application of new planning theories has been effective, the planning community has questioned and disagreed on the value of urban master plans: some argue that the current master plan has constrained urban development and should be replaced by a conceptual plan; others argue that the master plan is a rigorous and complete statutory plan, while the conceptual plan is still at the level of planning research and is not yet mature enough to be easily replaced by the latter. There is also the view that master plans can be improved gradually through mechanisms such as 'reviews' to improve their operability<sup>[9]</sup>. Furthermore, historical planning experience shows that regulatory zoning systems do not necessarily provide certainty, but are often deployed in a flexible manner. Similarly, competing reform ambitions around sustainability and economic growth have led to discretionary planning systems that are rigid rather than flexible and unable to implement a strategic policy vision. Hybrid plan system combining these two planning systems therefore provides a degree of balance between planning certainty and flexibility, allowing for greater planning rationality.

# 3. Discretionary Planning

Guidance planning systems offer considerable flexibility and can also be described as 'discretionary' planning systems. They are generally based on case law and past examples as a basis for decision-making and policy formulation. This type of plan does not generally have a detailed plan, but only a schematic representation of the development. This type of plan does not specify the content of the control, but merely states the policies and objectives of the development, leaving the specific implementation options and measures to the control management of the plan<sup>[10]</sup>. The text of the plan is a statement of general land use and development policies, without specifying specific land uses.

# 3.1. Strength

The discretionary planning system, as a policy-guided planning system, is a statutory planning system

based on development plan policies and decisions that are simply too long term in outlook and therefore flexible its significant advantages and easily adaptable to constant change. In the face of development implementation, the final version of the decision system can be developed as late as possible and plan decisions can be made relatively quickly. The second significant advantage is that the discretionary planning system leaves a great deal of room for discretion for planners and policies in different places. In addition to this, discretionary planning gives the public the possibility to participate and to a certain extent the public often succeeds in changing policies and individual decisions. But the points at which they enter the system are limited. Most opportunities are gained during the consultation process of plan preparation<sup>[11]</sup>.

#### 3.2. Weakness

There are also negative aspects to this planning system. Firstly, there is a high degree of uncertainty and, as decision-makers largely determine what is critical to influencing decisions, there is a high risk of political or administrative deviation in the end<sup>[12]</sup>. Secondly, plans are separated from facts, the connection between the two is weakened and decisions do not necessarily follow the planned policies<sup>[11]</sup>. The scope for local authorities to implement plans is hampered by the centralised nature of planning institutional arrangements. Thirdly, the implementation of decisions may be in conflict and change may be resisted or even positive plans resisted and negative ones supported. Fourthly, as planners and political institutions enjoy a great deal of freedom, the need to regulate them in order to avoid corruption both complicates the political structure and increases the cost to the economy.

#### 3.3. Planning System of UK

The discretionary system is most representative of the UK planning system, which is a 'top-down' system, a hierarchical one in which each level of local government (i.e. planning) is accountable to a higher level of government, from national to local. Each local planning authority is required to prepare a development plan within the legal and policy framework set by central government and to exercise development control powers within the policies contained in the plan<sup>[13]</sup>.

Planning in the UK began with the Public Health Act [1875]. This Act empowered local authorities to control the standards and layout of housing through local regulations. This was followed by the Housing and Town Planning Act [1909], the first town planning law. This law regulated the way in which zoning laws controlled land. It empowered local authorities to take a comprehensive approach to controlling the spread of towns and cities. A statute that had a profound impact on the British planning system and the world of planning was the Town and Country Planning Act [1947]. This legislation remains largely physical and controlling in nature<sup>[12]</sup>.

The UK planning approach is characterised by the separation of plans and permissions, which can lead to a gap between the two, a difference that is bridged by what is described as a 'plan-led approach', whereby planning decisions follow the plan. Under the influence of different approaches and objectives of government. There is also variation in plan-making and practice, reflecting some of the concepts of governance and spatial planning that the planning system emphasises. In the UK, the two elements of land use, development control and town planning, are essentially legally separate.

This planning system is a relatively flexible one. A combination of policy making, development negotiation of planning permission applications and planning inspector adjudication is practiced. This form of planning system has resulted in the management of development control in planning being a political act rather than a technical decision. The legal and administrative system then forms an important basis for the planning system. Such a planning system is politicised, and where political integrity and technical expertise are not as good as they could be, there is a risk that the results of implementation may not match the original vision, and this uncertainty introduces a degree of instability to create an incentive for change<sup>[14]</sup>.

A further feature of the UK planning system is the use of planning as a framework for 'development control management' policies<sup>[10]</sup>. Under the Town and Country Planning Act, the statutory 'development plan' is not the only basis for development control management decisions in the approval of planning applications, and a number of other factors need to be taken into account, including other existing legislation, existing regulations, central government planning policy documents (PPS), and whether the development contributes to the development of the area.

#### 4. Regulatory Planning

The regulatory system establishes precise zoning for each part of the area covered by the plan and is accompanied by statutes or regulations that usually set statistical limits on land use and new development. A controlled planning system requires the preparation of national planning standards and codes and the development of national regulations, resulting in top-down, different levels of planning Controlled planning is expressed in the form of zoning laws (zoning) and is a control planning instrument. This planning system specifies the rights of development. Its most important characteristic is the normative nature of decision-making. Zoning may be use-based (regulating the use of land), or it may regulate building heights, land cover and similar features, or some combination of these. In theory, the main purpose of zoning is to segregate uses that are considered incompatible and then prevent negative externalities from urban development<sup>[15]</sup>.

#### 4.1. Strength

Regulatory planning is a form of planning that controls spatial development through general land use control by zoning, as a rigid structure with a high degree of certainty. It gives certainty to a wide range of people, not only homeowners and developers but also to those who make strategic decisions, where homeowner power is respected and developers are less exposed to risk and less prone to sudden changes or politically expedient planning decisions<sup>[12]</sup>. At the same time, all planning decisions are highly prescriptive, generally detailed plans, which are specific and detailed and legally constrained. In addition to this, the regulatory form of planning provides a coherent, long-term strategic view of future development and is capable of long-term prescriptive planning, which may be able to address wider planning concerns. A final advantage exists in that third parties, to a certain extent, enjoy a great deal of power to challenge decisions using legitimate grounds of authority, a factual condition that is less prone to corruption.

# 4.2. Weakness

In addition to the advantages mentioned above, it is important to note the disadvantages of this planning system. The most salient point is that regulatory planning is not flexible enough, may be unpredictable, difficult to face unexpected situations and has little possibility of change. The second point is that the certainty of planning is easily limited by the realities of the situation and thus weakened. Another difficulty is how to relate detailed zoning and regulations to larger scale strategies. Because zoning systems suggest a close relationship between zoning plans and decisions on individual development applications, at the same time they weaken the link between individual development decisions and the longer-term, larger-scale strategy for the city group as a whole or the region as a whole. Such detailed planning decisions take a long time to develop and the need to balance individual rights with local long-term macro planning is a difficult issue. In addition, zoning plans usually have statutory effect, so individual elements may be challenged in court, leading to further delays<sup>[12]</sup>. In some countries, this also means that third parties have the right to challenge the decision. Due to the zoning form of planning, the frequent increase in zoning in the later stages of urban development can lead to accelerated urban expansion, which may be too rapid or even sprawling.

#### 4.3. Planning System of Japan

Zoning is the most widely known form of Regulatory Planning, and Japan uses more mixed-use zoning in its unique cultural context. Under the Japanese government administrative system, the transition from national planning to urban planning is a top-down process. The National Land Agency is responsible for preparing the National Land Use Plan, in consultation and coordination with the relevant central government departments (involving the Ministry of Construction, the Ministry of Transport, the Ministry of Agriculture and Fisheries and the Ministry of Internal Affairs) and local governments. The National Land Use Master Plan divides Japan's national land into five zoning categories: urban areas, agricultural towns, forest areas, natural parks and conservation areas. Of these, the land use zoning categories have grown from a purely three zoning districts (residential, commercial and industrial) in 1919 to 12 zoning districts in 1992. Residential zones allow almost any use, although the permitted floor area ratio (FAR) and plot coverage are lower compared to commercial zones. Even in many industrial areas, housing functions are present. Japanese style mixed-use zoning creates a flexible pattern of space that allows for easy home-work commuting and an overall compact and efficient land use pattern; however, it also inevitably suffers from the disruption of different land uses and higher monitoring and

surveillance costs, although this is not as severe<sup>[15]</sup>. The most important reason for this form of planning, which has resulted in multifunctional areas with convenient living conditions, is probably the cultural preference for high density and mixed land use and the fact that land resources are relatively scarce in Japan.

On balance, Japan tends to favour mixed-use areas that are more convenient to live in. However, the high density generated by natural development combined with mixed use can reduce the comfort or quality of the residential environment, such as congested traffic and noise. On the other hand, this mix of uses can increase flexibility in land allocation and accessibility to commercial facilities for residents. As a result, mixed-use structures may generate higher target profits than single-use models. Where zoning systems provide sufficient information and effective delineation of land rights so that land development decisions can be made more easily, effectively and efficiently<sup>[16]</sup>.

#### 5. Hybrid Planning

While the regulatory zoning approach forms the general basis of many national planning systems, many countries have also developed and integrated more discretionary powers into their planning systems to provide additional flexibility. This mix of regulatory and discretionary approaches is often described as a hybrid system. Although the traditional urban planning system consists of several levels: 'master plan, zoning plan, control plan and construction plan', the existing planning system, which is rooted in a planned economy, is not a perfect system and is bound to be deconstructed and reorganised in the course of its development as the social and economic transformation takes place. In the process of development, it will be deconstructed and reconstructed in line with social and economic transformation. It can be replaced by a sub-system of conceptual planning, recent planning and policy planning, which can be considered as a composite master planning system.

Urban development policies need to consider the relationship between national development plans and cities in the same area. A sound approach to urban planning needs to address those factors that are diverse. Cities also contain culture and structure and have their own identity. Urban planning and development must maintain the identity of an area as the city grows. Thus, under the original two broad directions of the planning system, a hybrid planning has developed that grafted on two or even more systems.

#### 5.1. Strength

At a macro level, hybrid planning has the distinct advantage of balancing a degree of certainty in decision making with flexibility in implementation, combining both possibilities, making plan planning and decision implementation more coherent and more likely to result in positive planning outcomes. In addition, hybrid planning offers great potential to support the creation of sustainable urban spaces in terms of the cost and process of acquiring land for public use. This makes sustainable urban planning less cumbersome, as only a few actors need to be dealt with in deciding on land use and compensation, as opposed to situations where land ownership is fragmented and individualised. Studying mixed planning experiences in towns and cities therefore adds value to the call for locally adapted urban practices. Hybrid planning combines the local context of the planning country and connects national cultures, leading to the possibility that multiple frameworks exist and are more locally adapted. It also takes into account the shared vision of local people, or local needs for a better future for the city. If the shared vision is in line with the directions and policies of the government and urban planners, it will become an area for data consideration and analysis. Such a situation will lead to the identification of specific plans, including important details of plans and decisions.

#### 5.2. Weakness

The counterpoint to such advantages is the complexity of planning plans, which often require consideration of multiple factors, from the long-term development outlook of the country to phased planning objectives, and even more detailed planning points that need to be considered, making the process complex and the development of planning plans difficult. Hybrid planning can evolve into a new form of urban sprawl when it is not properly developed. Furthermore, where land use plans do not designate mixed-use development, but essentially zone for residential and a few economic uses, the function and sustainability of peri-urban communities is compromised as they have few economic and administrative opportunities to function well. At the same time, agricultural land is swallowed up by low-

density residential development. This makes it difficult to create spatially integrated and socially inclusive urban spaces, leading to the dominance of colonial zoning approaches, which promote a single traditional urban centre without ensuring sustainable use of land and resources in urban development<sup>[17]</sup>. Different national cultural contexts will face different planning issues, and the specific shortcomings faced by individual countries need to be critiqued in relation to the hybrid planning schemes developed by the country.

# 5.3. Planning System of Bangladesh

Take the example of Bangladesh, one of the countries currently using hybrid planning. In the early days, as Bangladesh was a British colony, the local planning preparation followed the characteristics of the British planning system. According to the Town and Country Planning Act 1968 in the UK, a two-tier system of development planning was identified, namely structure plan and local plan, but did not consider in depth the socio-economic aspects of urbanisation in Bangladesh. It can be observed that the master plan approach was exported to South Asia along with planning legislation and development control regulations systematically copied from the UK<sup>[18]</sup>. However, this blueprint approach to physical planning was challenged by the rapid urbanisation and resource constraints in developing countries<sup>[19]</sup>. In this context, the master plans for the cities of Dhaka and Khulna in Bangladesh, which were developed in the 1960s based on this planning system, failed to achieve their ultimate goals.

With Lindblom urging participatory planning through incremental planning (1959) and Davidoff advocating planning (1965), this major shift in global style planning led to the integration of strategic planning approaches in global planning practice and also influenced planning approaches in Bangladesh, where master planning approaches were replaced by strategic planning approaches<sup>[20]</sup>. The strategic plan was introduced to remove the rigidity of the master planning approach and to introduce a more open and participatory policy framework. As a result, the original two-tier planning system in Bangladesh has gradually become a three-tier planning system, namely the structural plan, the master plan and the detailed area plan. The structure plan is a strategic plan at the macro level, a policy outline that provides guidance for the development of the area over a longer period of time, and provides a structural plan for the macro development of the city, with policy zoning and related policies. The master plan designates more specific land use spaces according to the different functions of urban development, and guides the rational distribution of urban population according to the nature and characteristics of the different functions, but does not plan the spatial layout and land development details. The detailed plans continue the characteristics of the local plans, focusing more on the integration with local conditions, deepening the above two levels of planning and selecting development projects for short-term implementation based on the definition of long-term development plans. In specific cities, DAPs are designed to control sprawling growth and guide the planned development of specific cities (Figure 1).

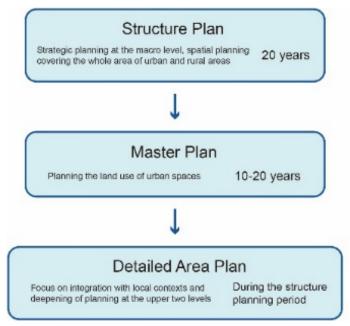


Figure 1: Framework of the Planning system in Bangladesh

#### 6. Conclusion

The advantages and disadvantages of the different main forms of planning that exist today are mentioned, and the reality of their application and development in different cultural contexts is demonstrated with examples from different countries. The use of hybrid planning systems, which are more balanced between flexibility and certainty, is also analysed in practice.

It is important to acknowledge that each of the different planning systems has its own strengths, which is why they have developed to the point where they are still commonly used by the country. However, they do have their drawbacks. It is difficult to judge which planning system is theoretically optimal in a single way. Therefore, when applying these planning systems to the actual development of a country, it is necessary to take into account the country's own cultural context and to arrange development in a way that is appropriate to the local context. At different stages of the country's development, different planning and management methods can be adopted for different regions. For example, in the case of large cities with advanced social and economic development, due to their large scale, complex functional relationships and the importance of the strategic location of the city, the study of urban areas and their spatial development strategies should be a prerequisite for the operation of the planning system, and while strengthening action-oriented planning, strengthening the statutory implementation of public policy in planning and the systematic operation of the entire complex master planning system as a whole is conducive to improving the planning The whole complex master plan system should be operated systematically as a whole. For small and medium-sized towns with relatively simple socio-economic systems, the depth of application of the units of the composite master plan system should be determined according to the planning and construction needs of the town itself. The limitations of this paper are also evident in that there are many types of sub-categories of different systems of planning, and in critically summarising the strengths and weaknesses, it does so in the form of a general overview of the broad types of planning, without delving into the strengths and weaknesses of the different directions of planning systems under its catalogue. After analysing these three different planning systems, I personally believe that the hybrid planning system is the most widely used one, which combines different planning systems, is more comprehensive and complete, and may also be a theoretically based trend for future urban development. However, there are still many factors that need to be taken into account in the real application of the system in order to make the theoretical planning system better fit the national context.

#### References

[1] Friedmann, J. (2020). Planning in the Public Domain. Princeton University Press.

- [2] Thomas, D. and M. Tvrdý (2012). Flexibility and Commitment in Planning. Springer Science & Business Media.
- [3] Thornley, A. and Rydin, Y. (2002). Planning in a Global Era. Routledge.
- [4] Carmona, M. and Sieh, L. (2004). Measuring Quality in Planning.

[5] Rosenhead, J. (1980). Planning Under Uncertainty: The Inflexibility of Methodologies. The Journal of the Operational Research Society, 31(3), p. 209.

[6] Janin Rivolin, U. (2008). Conforming and Performing Planning Systems in Europe: An Unbearable Cohabitation. Planning Practice and Research, 23(2), pp.167-186.

[7] Steele, W. and Ruming, K. (2012). Flexibility versus Certainty: Unsettling the Land-use Planning Shibboleth in Australia. Planning Practice and Research, 27(2), pp.155-176.

[8] Newman, P., and Thornley, A. (2002). Urban planning in Europe: International competition, national systems and planning projects. Routledge.

[9] Zou, B. (2003). Exploring the Implementation Mechanism of Urban Master Plan - Review of Shenzhen Urban Master Plan and Countermeasures. Urban Planning Journal, pp. 21–27.

[10] Yu L. (2011). Controlled and guided planning and future trends in planning systems - The Netherlands and the UK as examples. International Urban Planning, (5), pp.56-65

[11] Healey, P. (1988). The British planning system and managing the urban environment. Town Planning Review, 59(4), p.397.

[12] Booth, P. (1995). Zoning or Discretionary Action: Certainty and Responsiveness in Implementing Planning Policy. Journal of Planning Education and Research, 14(2), pp.103-112.

[13] Tewdwr-Jones, M. (1999) Discretion, Flexibility, and Certainty in British Planning: Emerging Ideological Conflicts and Inherent Political Tensions. Journal of Planning Education and Research, 18(3), pp.244-256.

[14] Allmendinger, P. (2006). Zoning by Stealth? The Diminution of Discretionary Planning. International Planning Studies, 11(2), pp.137-143.

[15] Lai, S. and Han, H. (2012). On failure of zoning. International Journal of Society Systems Science, 4(4), p.369.

[16] Lai, S-K. (2001). 'Property rights acquisitions and land development behavior', Planning Forum,

*Vol.* 7, pp.21–27.

[17] Akaateba, M.A. (2018). Urban Planning Practice under Neo-customary Land Tenure. Technische Universität Berlin.

[18] Khan, S. and Swapan, M. (2013). From blueprint master plans to democratic planning in South Asian cities: Pursuing good governance agenda against prevalent patron–client networks. Habitat International, 38, pp. 183-191.

[19] Rakodi, C. (2001). Forget planning, put politics first? Priorities for urban management in developing countries. International Journal of Applied Earth Observation and Geoinformation, 3(3), pp.209-223.

[20] Kabir, A. and Parolin, B. (2012). Planning and Development of Dhaka—A Story of 400 Years. 15th International Planning History Society Conference, Cities, Nations and Regions in Planning History, Sao Paulo, 1-20.