

Penang Forum Agenda 2018

The Penang Forum has a list of demands which it calls on Penang's newly elected officials of 2018 to act upon and deliver. These demands are related to the three principles of good governance, social inclusion and sustainable development.

Penang Forum is a voice for the public interest and progressive social change. Formed in 2007, the Penang Forum is a coalition of civil society organizations and affiliates. It is made up of committed activists who have dedicated up to four decades of their lives for a better society (a few of whom have served time for their beliefs), as well as talented young activists. Penang Forum's views are informed by a panel of scientists, ecologists, economists, lawyers, educators, cultural specialists, human rights activists and other public intellectuals of international standing.

We periodically organise public forums to discuss issues that are of importance to the Penang people and highlight the recommendations to the Penang state government. Among the recent issues we have taken up are hill development, flooding and transport planning. Penang Forum members have an established track record in working together with federal, state and local governments, and the private sector, for a better Penang and a better Malaysia.

In 2008, Penang Forum produced a declaration and gathered issue-based working groups to produce a comprehensive report of the issues confronting Penang. This was addressed to the newly-elected Pakatan government. In the last ten years, the state has made progress on some fronts but has also seen major challenges arising from overdependence on growth driven by the property sector and tourism. Car-centred urban sprawl and overdevelopment are destructively encroaching upon our hills, rivers, and seas. We believe that our present trajectory of development is unsustainable.

A far-sighted vision for Penang requires a paradigm shift to new urbanism, sustainable transport and environmental resilience. The New Urban Agenda is supporting the call for a new urbanism — transit-oriented development, walkable downtowns, mixed-income housing, plenty of public green open spaces and social inclusion. While Penang Forum's 2018 demands are more focused on local issues, it supports and complements demands made by other progressive civil society groups on national issues.

The following are Penang Forum's recommendations and reports:

Good governance and strong public institutions

1. Bring back local elections
2. Increase civil society representation in the interim
3. PM, CM, and MB focus on holistic role and should not take on other ministries/portfolios
4. Limit the terms of office of the PM, CM, and MB to two consecutive terms
5. Politicians should not sit on boards of government-linked companies

6. Immediate gazetting of Local Plans with full public participation
7. Start a Penang Youth City Council to develop projects on issues important to youth.
8. Encourage youth representation in urban development planning discourse
9. Stop swap deals in land reclamation

Equitable sharing of resources and social inclusion

10. Adopt a comprehensive approach to housing policy, prioritising social housing for B40
11. Provide affordable housing which is no more than 3 times annual income for M40
12. Make public buildings, spaces and transport accessible for people with disabilities
13. Fulfill employment and housing quotas for people with disabilities
14. Increase the *Warga Emas* cash handout and target only the elderly from B40 households.
15. Upgrade public facilities, council and state flats, to elderly-friendly universal design.
16. Update, adopt and implement the 2013 Penang Gender Policy to achieve gender equality
17. Enhance gender and leadership training and accelerate women's representation in politics
18. Implement a fair labour policy and provide decent housing for migrant workers
19. Ratify the 1951 UNHCR Convention
20. Support refugees' access to education, decent housing, healthcare and other services
21. Reclaimed land should be leasehold
22. Ensure public access to waterfront and coastline

Sustainable development and environmental protection

23. Planning approvals and densities should be based on carrying capacity of the area
24. Prioritise accessible and integrated public transport over highway building
25. Immediate implementation of bus lanes and BRTs
26. Improve ferry service and introduce cross-channel rail link instead of building a tunnel
27. Stop creating artificial islands through reclamation
28. Include climate change in all aspects of planning
29. Immediate moratorium on development projects on hill land
30. More stringent prosecution of illegal clearing of hill land
31. Make urban spaces more spongy to prevent flash floods
32. Stop cutting down mangroves, conserve and expand mangrove areas
33. Work towards joint World Heritage inscription of Pulau Jerejak and Sungai Buloh
34. No bridge, no reclamation and no theme park on Pulau Jerejak
35. Develop a state urban forestry action plan
36. Conserve and increase public open space and greenery
37. No cable car and rifle range in the Penang Botanic Gardens
38. Gazette the Prangin Canal site as a public park
39. Extend heritage protection to heritage sites outside the World Heritage zone
40. Develop sustainable and responsible tourism rather than mass tourism

Reports

Good governance and strong public institutions

1. Good Governance
2. Planning for Sustainable Development

Equitable sharing of resources and social inclusion

3. Social and Affordable Housing
4. Social Inclusion for People with Disabilities
5. Youth and Students in Penang
6. Gender Equality and Justice for Women
7. Senior Citizens
8. Migrant Workers
9. Refugees

Sustainable development and environmental protection

10. Transport – The Way Forward
11. Land Reclamation
12. Environment, Natural Resources and Climate Change
13. Hill Land Policies
14. Floods
15. Mangroves
16. Pulau Jerejak
17. Urban Forestry
18. Gardens, Parks and Public Open Spaces
19. Prangin Canal
20. Heritage

1. Good Governance

Good governance focuses on the way decisions are made and implemented. Principles associated with the practice of good governance include transparency, accountability, rule of law, as well as equity, effectiveness and efficiency, responsiveness and democratic participation. As such, good governance requires democratic institutions that are free of corruption and institutional processes that are subject to independent checks and balances.

Since Independence, our government institutions have weakened and our political system today is dominated by a systemic culture of patronage and money politics. Politicians use their power to grant governmental contracts and monetary rewards to their cronies and followers, getting ‘kickbacks’ in return (whether it be for the gain of the individual or political party or both). From the other side, businessmen use their financial clout with politicians to gain financial and market advantage. Other types of abuses range from bribing government employees to using complicated manoeuvres to siphon off money from public funds.

Such abuses increase in magnitude with the concentration of power within government. Power concentrates in the office of the prime minister at the national level, and in the offices of the chief ministers and *menteri besar* at the state level. This power concentration is exacerbated by the prime minister (chief minister/ *menteri besar*) directly taking control of other important portfolios, such as the prime minister doubling up as finance minister, or the chief minister/ *menteri besar* heading multiple portfolios.

This kind of practice is the very epitome of bad governance. It leads to a milieu that makes it difficult to institute checks and balances. At the end of the day, the interest of ordinary citizens and the general public is sacrificed to the interest of politicians and businessmen.

At this historical juncture, a range of reforms are necessary to reinstate and reinvigorate our political democracy. In this declaration, however, we will focus on the two systemic problems of (i) the abuse of political power for financial gain, and (ii) the concentration of governmental power. In order to break this conundrum and sever the loop between political power and financial interest, we propose the following reforms.

1.1 Political Funding Reform

First, reform the system of political funding. In principle, we reaffirm that our democratic system requires active citizenship participation through organising in political parties. Political parties perform a public function in forming the people’s political will. As such, political parties should be provided with public funding based on a measure that reflects their public support. At the

same time, regulatory mechanisms should be put in place to cap and to make transparent the financial contribution from a single individual or organisation to a politician or political party. Furthermore, maximum limits can and should be placed on overall public funding, and on the amounts that can be spent in an election campaign.

To date, there have been three sets of proposals by civil society organisations and individuals:

- (i) Transparency International's 2011 *Reform of Political Financing in Malaysia*, available at <http://www.transparency.org.my/wp-content/uploads/2013/08/11b.-Crisis-Memo-English.pdf>
- (ii) Reforms for transparent and accountable political funding in Malaysia, 2015, endorsed by 70 civil society organisations, available at <http://www.bersih.org/wp-content/uploads/2016/04/Political-Financing-Reforms.pdf> and
- (iii) Wong Chin Huat's 2017 suggestion 'Funding political parties from the public purse', available at <https://www.malaysiakini.com/news/397816>

The National Consultative Committee on Political Financing, established in 2015, issued its recommendations in October 2016 (available at <http://politicalfinancing.my/wp-content/uploads/2016/10/LAPORAN-JKNMPP-ENGLISH.pdf>). This report borrowed from the recommendations of civil society, but there were significant omissions.

To date, no steps have been taken toward legislating political financing regulations. Meanwhile, Pakatan Harapan has issued their 2018 *Buku Harapan*, promising reforms based on the principles of public funding of political parties, subjecting political parties to auditing and maximum limits on assets, transparency on sources of political funding, as well as disallowing government-linked companies from making political contributions. Penang Forum endorses these proposals while calling for additional measures such as placing maximum limits on financial contributions by an individual or company, and limiting spending on elections to be incorporated. A comprehensive public debate and consultation should be conducted in the making of this legislation.

1.2 Reverse the concentration of power within government

In order to curtail the process of concentration of power within government, we urgently need legislative and administrative reforms to constrain prime ministers, chief ministers and *menteri-menteri besar* from taking direct charge of another ministry or portfolio. The prime minister's role is to lead, with the cabinet, the whole of government, a crucial aspect of which incurs having to balance the sectoral interests of each ministry. Furthermore, the need for the prime minister to work together with the minister of each portfolio in and of itself introduces a check and balance right at the top. The same argument may be made for the chief minister at the state level. Hence, the prime minister/ chief minister/ *menteri besar* has to focus on this overall and leading role and not detract from it by taking charge of another portfolio.

The posts of prime minister, chief minister, and *menteri besar* should be limited to two consecutive terms. The prime minister should not also hold the finance minister portfolio, and the Prime Minister's Department should be downsized and its budget curtailed. Penang Forum calls for this general principle to be extended to the state level, and to encompass ministries and portfolios beyond just the finance ministry only.

1.3 Politicians should not sit on the boards of government-linked companies

Government-linked companies belong to the nation and its citizens, and in their interest, should be run in the most professional and ethical manner. As such, there should not be any political interference in decision-making. Politicians in active public service exercise power in various ways, and can bring undue pressures on government-linked companies to make politically-motivated decisions that serve particular interests. Therefore, Penang Forum calls for legislation that prevents politicians in active public service from sitting on the boards of government-linked companies as well as having other business and corporate positions that can result in conflicts of interest. Boards of government-linked companies may comprise of civil servants, professionals, capable members of the public and retired politicians. These GLC boards should be answerable to Parliament or the State Assembly in principle, which may be effected in practice through parliamentary or state assembly committees.

1.4 Bring back local elections

The suspension of local government elections in 1964 was legalised under the Local Government Act in 1976. Local government agents are therefore appointed and there is no democratic mechanism by which they may be called to be accountable to citizens. Instead, they are beholden to the political leaders or parties by which they are appointed. Furthermore, the absence of locally-elected government undermines the principle of 'no taxation without representation'. The lack of legitimacy of appointed councillors is reflected in the informal domination of state government, or in some cases, of non-elected civil servants, over processes of local government. Thus for example, the one-stop centres in that were created in 2007 effectively concentrated the power of granting permission for development in the hands of the civil service head of local government, i.e. the mayor or council president as the case may be, and a few appointed councillors. In one recent case in Selangor, the mayor of a city council approved a project that did not adhere to guidelines and the case was called out as an abuse of power. In other cases, the mayor may be accused of submitting to the unfair dictates of state government. Penang Forum therefore calls for bringing back full democracy by reinstating local government elections.

1.5 Immediate enhancement of local government representation

In 2008, an allocation of four seats in each local authority was pledged to representatives of public interest groups, but today it is only one seat per council. If councillors are to be appointed,

political will to improve local government legitimacy could be demonstrated by selecting councillors who fit the criteria outlined in the Local Government Act 1976 (Act 171):

‘Councillors of the local authority shall be appointed from amongst persons the majority of whom shall be persons ordinarily resident in the local authority area who in the opinion of the State Authority have wide experience in local government affairs or who have achieved distinction in any profession, commerce or industry, or are otherwise capable of representing the interests of their communities in the local authority area.’

In this interim period before local elections are restored, Penang Forum calls for increased civil society representation on the Penang Island City Council (MBPP) and the Seberang Perai City Council (MPSP). Specifically, we call for more civil society councillors who represent public interest groups, rather than political parties or business organisations, and observing the clause, ‘the term of office of each Councillor shall not exceed three years’.

2. Planning for Sustainable Development

2.1 Sustainable Planning

The concept of Sustainable Planning has been firmly articulated in the UN Sustainable Development Goals 2012. Penang has yet to adopt a planning outlook that reflects the new paradigm being promoted by the UN. Penang state and local governmental planning policies, principles, strategies and actions are not aligning with sustainable development goals, but instead are moving away from them. For example:

- Densities and plot ratios are being increased to levels never before seen in Penang (e.g. from 30 units per acre to 145 units per acre)
- Planning continues to give precedence to roads and cars. Current state transport initiatives do not take into account advances in transport planning and future technological changes
- Approvals have been given for high density hill land ‘special projects’.
- Marine reclamation is taking place all round the island

The net result is that Penang has become one big urban sprawl, with urban development encroaching on the hills and the coastline. Urban planning is ad hoc, with no regard for scale or established housing patterns, compatibility, sensible densities, infrastructure constraints, carrying capacity, or traffic and environmental impacts.

2.2 Statutory Planning Compliance

The State Planning Authority does not comply with several provisions of the Town and Country Planning Act. The Penang Structure Plan (2005–2020) was gazetted in 2007. It is a requirement that immediately after, Local Plans have to be prepared and gazetted. This has not taken place despite Draft Local Plans being approved in-house by Penang Island Municipal Councillors in 2008. In 2017, 10 years after the gazetting of the 2005–2020 Structure Plan and without the gazetting of Local Plans, the State Planning Authority presented a Report of Survey for the *next* Structure Plan (2021-2030) for which comments from the public were invited.

2.3 Absence of Gazetted Local Plans

With the exception of the 1999 Penang Hill Local Plan and the George Town Special Area Plan 2016, no other Local Plans have been gazetted. The absence of gazetted Local Plans has resulted in confusion and contradictions, with the State Planning Committee reaching decisions and issuing approvals that may be questioned. The gazetted Local Plan for Penang Hill appears to have been ignored in current plans for the Hills. (for example, the carrying capacity of the Hills

which was 7,000 per day was raised to 10,000 per day. This limit has now been exceeded and plans are afoot to further increase this guideline.)

2.4 Special Area Plans

These have been prepared for both the George Town World Heritage Site as well as the Penang Botanic Gardens. In essence these are Local Plans. The George Town SAP was needed to fulfill a UNESCO requirement. It is a well-administered plan, with the assessment of compliance by external authorities. The SAP for the Botanic Gardens followed the requirements of the planning process without the ‘spirit of the process.’ After full public exhibition, amendments were made to the SAP, which ignored recommendations from both consultants and the public, thereby subverting the entire planning process.

2.5 The Designation of Special Projects

Several highly controversial hill land high density projects have been granted approval because they have been designated ‘special projects’ by the State Planning Authorities. The designation in the Structure Plan of ‘special projects’ is meant for public projects or for public amenities. This guideline is clearly not followed in the case of approvals granted for private condominium blocks and luxury hotels under the label of ‘special projects.’

2.6 New Urban Agenda

In keeping with the recommendations of the New Urban Agenda, Penang should make cities inclusive, safe, resilient and sustainable. This includes, amongst other things:

- a) designing for social inclusion of people with disabilities, and for a child-friendly city,
- b) forging urban solutions that address poverty and homelessness,
- c) strengthening urban resilience and disaster preparedness,
- d) integrating environmental objectives into Penang's planning, economy and community development,
- e) reducing pressure on ecosystems (reducing carbon footprint, protecting biodiversity).

Recommendations:

1. The immediate preparation and gazetting of Local Plans after unrestricted public review, and responsible revisions
2. Broader participation and unrestricted public review and responsible revisions of the next Structure Plan (2020—2030)
3. Sensible densities and plot ratios respecting scale and established housing patterns
4. A cessation of all approvals of ‘special projects’ that are not for public amenities

5. All high-rise development applications on hill land should not be entertained
6. Planning approvals should be based on carrying capacity of the entire area – traffic, green spaces, etc (previous approvals should not dictate current applications)
7. The increase of ‘adjoining property’ objections from the current 20m. If size of development application is large, the entire constituency should be consulted.
8. Large green-fields affecting the larger environment should have gazetted Master Plans to prevent future threats and incursions
9. UNESCO planning principles related to urban heritage as articulated in the Historic Urban Landscape Policy should be put into practice.
10. Planning guidelines should focus on increasing river reserves.

3. Social and Affordable Housing

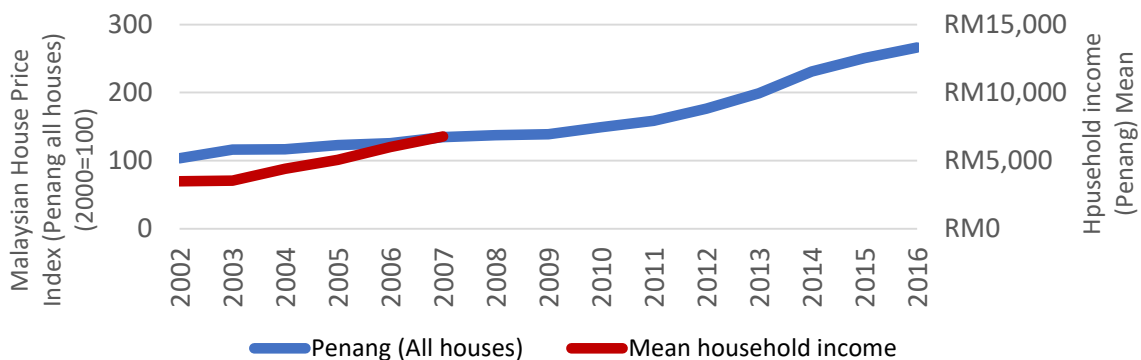
Background

While the Penang State government has developed an affordable housing programme in recent years, there remain many challenges to be addressed in ensuring all have access to decent, affordable housing that enables Penangites to live fulfilling lives.

Since 2009 house prices have on the average risen twice as fast (18%) as household income (8%). This growing gap between house prices and incomes is creating a serious affordability challenge, moving the average house far out of reach of the average household. In 2016, the house price-to-median income ratio in Penang is 6.32, the second highest in Malaysia after Kuala Lumpur (6.88), well above the affordability ratio of 3.

According to *The Edge*, what the Penang residents could afford in 2016 was RM118,000 for the bottom 40%, RM230,000 for the middle 40% and RM442,000 for the top 20%. But the average price of all houses in Penang at the end of 2016 was RM410,000. So clearly, there is a serious affordability problem.

Alongside the rising affordability challenge, Penang is faced with challenges in maintaining decent housing standards in established affordable housing areas and the need to improve existing stock and to ensure future affordable housing creates sustainable, liveable and lifetime communities.



ISSUES

1. **Housing as Basic Human Rights and not Speculative Commodity:**

Every government should strive to provide the following basic human rights to its citizens. These should include the right to food, shelter, education and health. Government policies should therefore prioritise and focus on providing affordable homes for people in the context of creating socially vibrant communities. Construction of a surplus of high-end housing puts more stress on land and environment but does not help to reduce housing shortage. Many condos which are bought as investment are left vacant or rented out as Airbnb premises, potentially causing problems for neighbours. Unfortunately, housing policies have been captured by developers who regard housing primarily as a commodity to be bought and sold for a profit. This should be turned around.

2. **Housing governance:**

Penang State Government's attempts at developing a new governance structure for housing, while often frustrated by Federal agencies, can still be addressed by developing stronger working relationships between existing agencies in the state to deliver a co-ordinated approach to housing.

3. **Typical problems with low-cost housing:**

- Low take-up of low-cost and low-medium cost housing might reflect that the housing is built in unsuitable locations, far away from jobs and schools; transport becomes a major expense which has not been factored into the affordability calculations.
- High-rise housing is costly to maintain, so it is more suitable for condos than low-cost housing; ultra high-rise low-cost housing may eventually turn into vertical ghettos with maintenance problems such as broken-down lifts.
- Due to medium-cost housing being bundled together with low-cost and low-medium cost housing, the so-called "affordable housing" developments may qualify for certain planning incentives, but in the end, due to loopholes, the purchasers are speculators or investors buying a second or third house, rather than genuine home-buyers.

RECOMMENDATIONS

1. **Meeting needs over demand:** Housing projections for Penang suggest that by 2030 there will be a shortage of over 100,000 homes for middle income groups (affordability between RM230,000 and RM400,000). While significant progress has been made in recent years in developing a programme of affordable housing, this pipeline will only meet 40% of requirements going forward. Penang needs a planning system which is empowered with a detailed understanding of housing needs across the state, with an ability to direct and influence the type of housing stock that is planned, approved and built, so that all households have an opportunity to access decent affordable housing.

- 2. Urban Regeneration:** The oldest low-cost housing developments in the state occupy land in well-connected and highly accessible urban locations but are no longer optimally used to house the poor. Furthermore, much of the older run-down private housing stock are no longer used as housing as the neighbourhoods they are situated in have been rendered unliveable due to traffic noise, pollution, and aging infrastructure. There should be a review of old housing areas, including heritage properties, to encourage the reuse of old housing stock for residential use through urban regeneration.
- 3. Conditions on development:** The process of planning and developing housing includes numerous charges and fees levied on developers. These should be viewed as a lever for shaping and influencing the housing market, with progressive charging structures which incentivise developers to build the type of housing required. This way, more funds can be raised from high end property which can then be channelled into affordable housing.
- 4. Managing and maintaining affordable housing:** Penang needs to develop a sustainable model for the management and maintenance of affordable housing. The responsibilities of developers, the local authority and the Commissioner of Buildings need to be re-examined so that management committees and residents are better supported.
- 5. Increasing Options for decent housing:** Housing affordability is not a challenge unique to Penang. Around the world there are a wide range of innovative financing approaches to increasing access to decent quality, affordable housing, such as shared ownership schemes, equity loans and deposit match programmes. Rent-to-buy schemes support those who rent from government to build equity to move into homeownership. For those where ownership is an unrealistic option, more can be done to ensure tenants experience decent quality affordable housing by developing landlord accreditation schemes, deposit protection (escrow), and providing longer term leases so that households can build their lives in their chosen communities with greater security. A tenancy enactment can also help to regulate rents, strengthen tenants' rights and promote a more stable rental market towards a climate of housing security.
- 6. Foreign workers housing:** Foreign workers should not be segregated into workers' barracks. Instead it is the responsibility of their employers to ensure that they are integrated into the local community in homes that meet minimum standards and that they are not crammed into quarters.
- 7. Housing density:** A careful review of the permissible densities is needed. Since 2008, in the absence of the Penang Island Local Plan, the maximum densities have soared six times from 30 units per acre to 184 units per acre.
- 8. Reclaimed land:** Reclaimed land should be treated as leasehold land to cool down the rise in land prices in the state—and hence, future property prices. In addition, there should be a strict review of foreigners owning property in Penang. If developers are allowed to build high-end housing mainly for foreigners, this will again drive up land and property prices

around the state. It will also perpetuate the mismatch between home prices and what Penang residents can afford.

- 9. Housing Requires a Comprehensive Approach:** Housing policy needs to take a broader consideration of all policies which impact on the livability of places. Land use pattern, physical planning, economic planning and transportation should be considered together to create successful places. Access to employment, the quality of the local environment and the provision of public spaces and amenities are all central to developing attractive, sustainable and prosperous communities. Housing policy should be integrated with other domains such as planning and transport, and also at the levels of local, state and federal authorities so that all actions contribute towards generating positive people-centred outcomes.

4. Social Inclusion for People with Disabilities

Social inclusion for Persons with Disabilities (PwDs) is one of the imperatives of the New Urban Agenda. Although the PwDs have been lobbying for accessibility at least since 1985 when they submitted recommendations to MPPP's first Penang Island Structure Plan, they still face immense obstacles to participating fully in society.

Over the years, various groups have worked to promote social inclusion through universal design and providing PwD facilities. The efforts of Society of the Disabled Persons Penang (SDPP), a self-help organisation run by disabled persons (founded 1988) and Sustainable Independent Living and Access (SILA) a network of disabled persons' organisations (formed 1998) to promote universal accessibility, should be recognized.

In 1993, Penang gazetted By-law 34A of Uniform Building Bylaws (UBBL) making it mandatory for all public buildings to provide access and facilities for PwDs. Old buildings, unless exempted, were required to be modified by 1996 to comply with the Malaysian Standards (MS1183, MS1184 and MS1331).

In 2008, as part of the Penang Forum "Report of Working Groups", a Memorandum to the Government of Penang on the equalisation of opportunities for persons with disabilities, was submitted by the SILA network, consisting of some 14 organisations and individuals. It contains recommendations on barrier-free access to built environment, accessible tourism and representation in government, as well as short and long-term action plans.

It was in the same year that Malaysia had signed the UN Convention on the Rights of Persons with Disabilities with a commitment to regulating the registration, protection, rehabilitation, development and well-being of persons with disabilities. Part III of Act 685 provides that persons with disabilities must be given the right to access and use of public facilities, amenities and services and buildings provided to the public on equal basis with persons without disabilities. These recommendations have not been met.

In 2016, the Penang Accessibility Action Group (PAAG) was set up by the state government to monitor and improve public access for the elderly and disabled community. In the same year, Habitat III, the UN Conference on Housing and Sustainable Urban Development, elaborated on Goal #11 of the Sustainable Development Goals: "Make cities and human settlements inclusive,

safe, resilient, and sustainable”, and emphasised participatory planning, social inclusion and the right to the city.

Issues

1. Due to inaccessible public facilities, public transport, public space, services and infrastructure, PwDs are unfairly being excluded from fully participating in job opportunities and social life. The majority of public buildings and facilities in Penang, such as KOMTAR, Dewan Sri Pinang, Penang Botanic Gardens public toilets, ferries to the train station, etc., still do not comply with UBBL34A and Malaysian Standards.
2. The architects and engineers of specific projects are responsible for the provision of accessibility, but for many projects, full connectivity is not achieved. While local government has made efforts to provide accessible walkways for wheelchair users and the blind or visually-impaired, many of these walkways are still not fully accessible due to issues such as inappropriate ramp slope, inadequate clearance, and lack of enforcement to keep walkways clear of temporary obstructions.
3. While Rapid Penang has adopted an OKU-friendly client charter and staff training, many obstacles persist which do not allow persons with disabilities to use public transport. Even though there are accessible bus stops, there is no connectivity.
4. Government workplaces are not barrier-free and cannot accommodate PwD employees and customers.
5. There is lack of political will to make all public places and facilities accessible in the shortest possible time.
6. There is no ‘accessible school’ in Penang, whether primary or secondary. It is impossible for PwDs to attend school independently if the built environment of schools do not comply with accessibility standards.

Recommendations

1. Local governments should adopt the policy of 1% employment quota for disabled persons across the board, as stated in the national plan for the PwDs. This policy is compulsory for all government agencies but sadly only a few ministries and agencies adopt it.
2. Allocate 10% low cost and low medium cost housing quota to deserving PwDs and their families.
3. Each local government should set up a Universal Design (UD) unit to oversee the implementation of all aspects of UD in all development projects. Set up a task force to systematically audit and rectify public buildings, PwD toilets and other facilities.

4. All plans submitted to local governments should have clear attachments in amplified scale showing design of UD features with all the scales, gradient, slope and size. It should also include the material type and colour.
5. Coordinate current project-based barrier-free built environment programs into a five-year master plan for all public space and services in line with Universal Accessibility Policy for personal mobility (outside and inside of buildings). Identify low-cost flats, ferry terminals, train stations, malls, colleges, universities, and public institutions to implement accessibility programs for ALL users, including the elderly, women with toddlers and children and for all categories of OKUs.
6. Upgrade walkways for accessibility, including providing accessible routes from car-parks, drop off points and bus stops, focusing not only on accessibility but also connectivity.
7. Set up a Universal Design (UD) Centre in Penang Institute.
8. Conduct workshops to input more understanding on the practical aspect of UD to all local government staff especially from relevant departments such as Planning, Building and Engineering so that they understand the principles and the implementation of UD.
9. Increase the enforcement and penalties for those who misuse facilities for the PwDs.
10. As PwDs are the best surveyors of accessibility, audits by PwDs should be organized so that accessibility, safety and ease of use of public facilities and services can be properly validated by persons with different types of disabilities.
11. Introduce at least one primary and one secondary school with full accessibility in each KADUN. Promoting education for PwDs can break the poverty cycle of about 80% of the PwDs in the country.

5. Youth and Students in Penang

The youth of today represent the future of our state and city. We believe in their potential in making a better urban future for Penang. It is therefore very important that the youth actively participate in the economic, political and social life of our state and city.

Penang Forum recognises the many efforts by the state government to engage and develop our young Penangites. The following are some notable initiatives in the last 10 years:

- a) Penang Education Council
- b) Penang Future Foundation Scholarship Program
- c) Penang Science Cluster
- d) Penang Youth Development Corporation
- e) Penang Free WiFi project
- f) The 24/7 Penang Digital Library

Issues

1. Universities and University Colleges Act (UCA) 1971 amended but university students are not satisfied

Since 2008, the UUCA was amended twice, i.e. in 2009 and 2012, to allow students over the age of 21 to join political parties and also to have academic freedom. Nevertheless, the main purpose of this act is still to curb student activism, and student activist groups are still calling for its abolishment.

2. Youth disengagement with politics, activism and urban development

A survey which Merdeka Centre conducted in late 2017, found that about 2.5 million Malaysian youths between the age of 21 to 30 years old (the largest population group in the country) are unregistered voters. The survey also found that our young generation “feel powerless to change the future of our people”. Together with the recent #UndiRosak campaign predominantly led by young people, the future of social and political activism seems bleak. Participation of young people in the discourse of urban development is also quite worrying. Public forums and consultations held by civil society and city councils often witness poor turnout among the younger generation.

3. Weak ICT infrastructure

Faster and cheaper internet connection is in demand due to our growing millennial population. Though Penang provides free wifi through their Penang Free Wifi Project at selected areas, feedback received about this service is that the internet speed is very slow. Our internet is so much slower and pricier than in Singapore, Thailand and Vietnam.

4. Bullying and suicide among young people

According to the World Health Organization, suicide rates among young people have been increasing. In Malaysia, the general suicide rate amongst Malaysians is on the rise and the National Health Morbidity Survey in 2011 identified young people between the ages of 16 and 24 as suffering high suicide risk.

In the past few years, cases of bullying among students in our schools show a worrying sign. The Hakam report on ‘Malaysian school bullying’ tells us that over 14,000 school bullying cases occurred between 2012 and 2015. From 2014 to 2016, there was a steep rise from 2,825 to 3,448 cases.

Recommendations

1. Development of Local Youth Plan

A Local Youth Plan should be developed to determine the state’s focus and direction for the future for youths. This plan should state how we will cope with the challenges Penang society is facing, in which direction we wish to see our youths develop, and what kind of development we would want youths to have for the betterment of their families, community and country.

2. Making information accessible to youth

Digitize data and public information, and make them available online. MBPP and MPSP should also consider making all Council meetings Live on social media. When planning for public forums and consultations, authorities should consider the availability and accessibility of young people.

3. Start a Penang Youth City Council

Organize a council made up of young people who are interested in developing campaigns and projects about issues that are important to them, and ensure that every young person can have a say in decisions that affect them. These young people may be recruited from local youth society, schools, voluntary organisations and residents' associations. Youth Councillors should be between the ages of 14 to 21.

4. Youth representation in Urban Development Plans and Meeting

The youth of Penang would like to have their voices included in all matters. In a survey by World Economic Forum, young Malaysians feel that their views are not always considered before important decisions are taken. We urge the state to increase and include representation of youth in matters related to urban development, e.g: the Penang Transport Council.

6. Gender Equality and Justice for Women

Background

Gender equality is premised on the principle that women and men are equal citizens who must be guaranteed:

- the best conditions to enable the development of their full potentials;
- equal power to shape society and their own lives in order to create a fairer and more democratic society
- equal opportunity to contribute to and benefit from economic, social, and political progress;
- equal and full access to social justice and human rights.

Although these principles – in word or in spirit – are embedded in many international conventions, national constitutions and statutes, state and local level legislations and pronouncements, patriarchy and unequal power relations remain to slow down, if not scuttle, their realisation.

Issues

As a result, even in a relatively developed and socially forward looking state like Penang, the statistics show that women are still lagging behind men on many fronts. To take just a few headline indicators as examples:

- Female Labour Force Participation in 2016 was only 57.9% against 79.9% for males, although the Penang number for females was still higher than the national equivalent that stood at 54.3%.
 - Increasing women's labour force participation and enabling their free choice to pursue a career is fundamental to the financial independence that would allow them to decide how best they can pursue their life goals.
 - However, this has to be accompanied by provisions that facilitate work-life balance, not only in terms of work place arrangements but also the reconditioning of gender roles within the family.
 - The provision of universal childcare facilities is critical to freeing women to participate fully in the work force.

- Political participation is an area that has long been a matter of concern: currently only 2 out of the 13 (15%) Members of Parliament representing Penang are women. The figures for State Assembly are 6 out of 40 (15%); State Executive Council 1 of 11 (0.9%). At the level of the Municipal Councils the numbers are 7 out of 23 (30%) for MBPP and 3 out of 24 (12.5%) for MPSP.
- Violence against women (VAW) be it in terms of physical or sexual abuse are reflective of the unequal power relations borne of the patriarchal system. Statistics for VAW at the state level are only available for a very limited number of years but they clearly reveal that men constitute at least 94% of perpetrators for domestic violence whilst sexual crimes are committed exclusively by men.

Clearly, urgent and effective measures are needed to reverse such trends of gender inequality. The Penang State Government took a significant step in 2011 by establishing the Penang Women's Development Corporation (PWDC) as the state agency for achieving gender equality. Its key initiatives include the introduction of Gender Responsive and Participatory Budgeting, and the initiation and implementation of women empowerment programmes in both the economic and political spheres. PWDC commissioned the drafting the *Penang Gender Policy* in 2013 which identified the key issues that needed to be addressed as well as recommended actions for dealing with the issues concerned. Unfortunately, the policy has yet to be officially adopted by the State Government and this has meant that the lack of a coherent strategy and plan of action towards the realisation of gender equality and substantive justice for women in Penang.

Recommendations

- Clearly, the most urgent measure that needs to be taken is to update (and revise if necessary) and officially adopt the Penang Gender Policy as a blueprint to guide state policies and actions to achieve gender equality and ensure justice for women of all strata, age-group, ethnicity and religious adherence.
- Although political education and leadership training has been a major plank of PWDC's programmes, the statistics show that representation by women in politics is well below the 30% minimum generally adopted, except in the case of MBPP. A review needs to be conducted and a more effective and systematic strategy adopted to boost the numbers.
- The National Conference on *Gender and Electoral Reform* organised by PWDC in 2016 explored various means to increase women's representation in legislative bodies. The next move is to convert the deliberations into action.
- Provision of services and support for survivors of VAW has mainly been the domain of the Women's Centre for Change, which has been able to spread its wings to the mainland with an annual state allocation for the operation of the *Pusat Perkhidmatan Wanita*

(PPW). However, unless there is multi-agency action it will continue to be a case of treating the symptoms rather than the cause. State government leadership and commitment at the level of the *Majlis Mesyuarat Kerajaan* (MMK) Wanita is necessary to facilitate this multi-agency public private push to reduce, if not eventually eliminate VAW.

- The provision of social safety nets for vulnerable segments of women, such as the elderly, disabled, economically disadvantaged groups as well as single mothers is urgently needed and has to take the form of long-term measures that facilitate independent living rather than occasional or annual handouts.

Gender equality will take a long time to achieve and the above recommendations barely scratch the surface of what needs to be done. However, justice for women is non-negotiable and the efforts to improve their status and well-being bode no delay.

7. Senior Citizens

Background

Penang currently has 214,000 senior citizens (aged 60 and above). By 2030, i.e. in 12 years' time, this figure will almost double to 400,000. Indeed, this places Penang as the state with the highest proportion of senior citizens—12.3% currently and 20.2% by 2030.

Aging population is a consequence of falling mortality rates, improved health and nutrition, longer life expectancy and most importantly, declining fertility rates. As a result, the average household size has shrunk, and is expected to shrink further. In other words, elderly people will have fewer family members to depend on for care-giving.

By 2025, 75.7% of Malaysia's population will be staying in urban areas. In some rural areas, elderly parents and grandparents are left behind when younger family members migrate to the urban areas for work. The urbanisation trend however means that more and more senior citizens would be staying in cities in years to come.

Issues

Low social support for the elderly population in Penang is a major issue. In a 2014 survey study carried out in Penang, it is found that 43% of elderly respondents are not active, and 16% have received poor social support. Other problems are unemployment, living alone, not living with family, and mental illness, including depression (Khan and Tahir, 2014).

Since 2008, the Penang state government has introduced a social benefit programme called '*Program Penghargaan Warga Emas*' which provides RM100 cash handout per year to people aged 60 and above who are also registered as voters in Penang (in the 2018 state budget, the amount is increased to RM130). It is reported that 167,489 recipients have benefited from this programme in 2017. Although every little helps, the amount is nevertheless too small to effectively help those who are seriously in need of financial assistance.

In a car-centric urban environment, elderly residents who do not have cars or people to drive them will find mobility to be a problem. This might be the main cause for the generally inactive lifestyle of senior citizens, when it becomes too much of a hassle, or perhaps even unsafe, to go out of their homes independently. Limited mobility will restrict the elderly citizens' involvement in social networking and community activities, which in turn, would affect their sense of wellbeing.

At present, public facilities and amenities for the elderly in most areas are sorely inadequate and badly maintained. The design of our cities is not senior citizen friendly. The Ministry of Urban Wellbeing, Housing and Local Government is currently drafting the Physical Planning Guidelines for the Elderly, which could be a positive and promising move to compel developers to take consideration of the needs of senior citizens.

Access to good quality healthcare is crucial for the elderly. While healthcare is a federal government responsibility, state and local governments can also provide some types of healthcare as social welfare, within their remit.

Recommendations

1. Instead of giving cash handouts to ALL senior citizens who are voters in Penang, the Penang State Government should target elderly residents from B40 households only, especially those who are financially struggling and living alone. The amount of cash handout for these B40 elderly residents should be significantly increased.
2. Since currently there is no mobile medical service provision by the Federal Government for the elderly who might have mobility issues, the Penang State Government should consider filling in the gap by setting up a few mobile medical ‘home care’ teams serving different areas to provide free health screening and medical on-demand services to elderly residents from B40 households (others might need to pay a small sum for service). This could be a collaborative or partnership project with private healthcare providers who can provide this service as part of their corporate social responsibility.
3. The Penang State or local government should provide grants to registered community organisations or groups that provide services and organise activities for senior citizens. Encourage and support these kinds of community activities by exempting fees on the rental of public amenities (e.g. community hall or activity centre) for such purposes.
4. Local government should have a strict guideline for developers to integrate and implement universal design for ease of access and mobility for senior citizens. This includes not just the areas inside buildings but also the entire development area. Intergenerational living housing models should be adopted.
5. Local government should also compel developers to allocate community, activity and green spaces that can be easily accessed and used by the elderly public. Otherwise, developers should make monetary contributions for the local authorities to build such public amenities.
6. The Penang State Government can provide incentives to reputable and qualified nursing home operators (which fulfil the high standard of care required by the Private Aged Healthcare Facilities and Services Bill 2017), to establish here in Penang, to meet the increasing demand for such services.
7. Local government should review and audit current public facilities and amenities, and upgrade or renovate them to elderly-friendly universal design. This is particularly true for council and state flats which house the elderly poor who are often ‘left behind’ by their families. This would include upgrading walk-up flats with lifts, making sure that corridors, pavements and roadways are evenly paved and brightly lit, providing traffic light crossings on routes that link flats to markets, food courts, and other recreational areas and public amenities, and ensuring that premises are kept clean and obstruction-free by regular maintenance.

8. Migrant Workers

Background

Penang has been built on the contributions of different migrant communities. Estimates for the whole of Malaysia place documented foreign workers at close to two and a half million, while undocumented workers may number up to two million. In the state of Penang, migrant workers make up at least 25% of the workforce, numbering more than 200,000. Without them, the state's economy would collapse. They are crucial to many sectors—construction, manufacturing, restaurant, services, as well as domestic service.

Despite their critical presence in Penang, migrant workers tend to be socially invisible. Many of us, Penang citizens and residents, turn a blind eye to the rampant exploitation that exists. In our indifference, we neglect the huge numbers and contributions of migrant workers in our state development and economic plans. We do not include issues of migrant workers in our discussions about our urban future and our planning for 'intelligent and smart' city, housing, transport, and sustainable development goals.

Issues

In Malaysia, foreign workers are covered by the Employment (Amendment) Act 2012. While this legislation governs the various aspects of employment, including contract of service, payment of wages, and conditions of work, nevertheless, the ineffective implementation of this law results in exploitation of foreign workers who are particularly vulnerable due to structures of migration operating in both sending countries and Malaysia.

For example, the bonding of foreign workers to specific employers or outsourcing agencies, leaves foreign workers vulnerable to exploitation by their employers because they are not able to change employers while they are in the country. Furthermore, the 2012 amendments to Employment Act 1955 allow for outsourcing agencies to stand in as the legal employers, therefore allowing the actual employers (companies, corporations) to avoid carrying out their employer responsibilities and obligations.

Undocumented workers are even more vulnerable because they constantly face harassment and demands for petty corruption money from unscrupulous government and quasi-governmental officials whom they come into contact with such as errant policemen, immigration officers, and RELA members. Much of the reason for the presence of large numbers of undocumented workers is that it is expensive to be documented, due to the high recruitment fees (in both sending and receiving countries) that have to be paid by documented migrant workers in a recruitment mechanism best described as 'debt bondage'.

In a situation of weak labour laws and collective organizing, workers, particularly documented and undocumented foreign workers, do not have the power to protest when their employers require them to work in conditions that risk their safety and health. Inadequate and unhygienic housing provided for foreign workers further increase health risks. Foreign domestic workers are in particularly vulnerable situations as they often live and work in employers' home and have difficulty accessing outside help in cases of abuse.

Recommendations

8. At the state level, the Penang State Government should:
 - a. Implement a voluntary Fair Labour policy for all companies operating in Penang, whereby they undertake to conduct an annual supply chain/employment audit, monitored by an independent unit set up by state government. This would demonstrate a unique commitment to tackle exploitation and human trafficking that will serve as an example around the region.
 - b. Protect the basic human rights of foreign workers to housing by ensuring that employers provide adequate housing (refer to section on Housing).
 - c. Honour its pledge in the Penang Paradigm, in collaboration with civil society groups, to set up and support drop-in centres for migrant workers (on the island as well as on the mainland), where migrant workers—both documented and undocumented—can find support and the possibility of redress where they have suffered abuse. This should also create a clear process to allow persons who are victims of harassment, arbitrary arrest and arbitrary detention to make a complaint in the knowledge they will be fully protected and the complaint will be acted upon.

9. At the national level, we recommend the following:
 - a. The Employment (Amendments) Act 2012 should be further amended to eradicate labour outsourcing firms and companies, making employers directly responsible for their workforce
 - b. There should be a coherent policy on foreign migrant labour that matches the country's labour needs, as set out in the Eleventh Malaysia Plan.
 - c. The recruitment and management of migrant workers should be based on a government-to-government (G to G) mechanism, thereby abolishing the need for private recruiting agents and companies.
 - d. The 'debt bondage' type of system should be abolished by making employers responsible for all recruitment and relocation costs and allowing migrant workers the flexibility of changing employers in cases of employers' unfair and exploitative practices.
 - e. The implementation of the Employment Act should be monitored and enforced with regards to employment contract, minimum pay, timely payment of wages, hours of work, as well as all other requirements.
 - f. Pay attention to workplace safety monitoring and accountability, and for proper safeguards to be put into place so that all workers, including both document and undocumented migrant workers, can be supported and protected with regard to an enforceable right to redress.

10. All levels of government should:
 - a. support migrant groups, local community-based groups and NGOs in addressing the particular vulnerabilities of domestic workers,
 - b. work with and provide financial support to relevant migrant and local community based groups together with civil society, to confront xenophobia and racism, dispel myths about migrant workers, and help affirm their contribution to our economy and society.

11. Support the recommendations of the Migrant Workers Right to Redress Coalition's report "Towards a Comprehensive National Policy for Labour Migration for Malaysia".

9. Refugees

Background

Refugees are by definition people fleeing from life-threatening situations and have a well-founded fear of serious reprisal if they return to their homeland. The vast majority of refugees in Malaysia at the moment are of various ethnic minorities from Myanmar. The Burmese authorities with the backing of the Burmese administration have been persecuting these minorities for many years, including the well-documented and still on-going horrific genocide against the Rohingya in Arakan/Rakhine state. There are an estimated 20,000 – 25,000 refugees in Penang – women, men and children.

Many of them have been here for years, and it is highly likely that the majority of them will be part of the fabric of Penang for the duration of their and our lifetimes, and beyond. But they have absolutely no rights: the Federal government has not yet signed the UN Refugee Convention or any associated protocols, nor has it introduced any administrative or legal framework to give refugees a status. They exist in limbo land. They are verified as refugees by the strict procedures of the United Nations High Commissioner for Refugees (UNHCR) but have no right to work (despite the fact they have to find a way to sustain themselves and their families), have no right to education (meaning, we are condemning a generation of children and adults living in our midst to an utterly bleak future), and access to healthcare and other basic facilities is limited by the huge financial cost and the very real possibility that they will be harassed and/or detained by the authorities.

The fact that they have no rights and no protection means they are hugely vulnerable to human trafficking and to modern day slavery. Members of the public, on the other hand, have very little understanding of who, or what, a refugee is and what their situation is here in Penang and in Malaysia.

Although the Penang state government has no power to confer rights on the women, men and children who are refugees in our state, it can still do a lot to welcome refugees here, to support community-based initiatives to empower them towards a life of dignity for themselves and their families here, and to help in the fight against modern day slavery and human trafficking.

Recommendations

1. To embrace all our Penang communities, welcoming people from wherever they are with respect, with joy and with commitment to treat every single person in Penang as human beings with shared rights and shared needs.
2. To support (with financial help as necessary) community-based initiatives to help refugees find education, healthcare and other services.

3. To include refugee households (as for migrant worker households) in all disaster relief programmes and aid, on an equal basis to local Malaysian households.
4. To lobby the federal government for appropriate steps to ensure all refugees have a legal status with concomitant rights, to protect them against harassment, extortion, modern day slavery, human trafficking and detention, including ill treatment by authorities.
5. To reject all forms of xenophobia and racism.

10. Transport – The Way Forward

Background

Soon after Pakatan’s victory in the 2008 elections, civil society recommended to the new Penang state government to establish a Penang Transport Council and a transport master plan. Public transport services for the State currently constitute only about 5% of transport mode share; therefore the improvement of public transport was a priority agenda for both the island and the mainland.

Working with civil society, the state government commissioned Halcrow in May 2011 to develop a holistic transportation plan for the state of Penang. The main objective was to shift demand for transport from car traffic to public transport. This Penang Transport Master Plan (PTMP) was officially adopted by the state government in March 2013.

However, in moving towards implementation, the state government has lost sight of the original objectives, and instead adopted a “Big-Bang” approach that focuses on building massive highways to move cars rather than people. The Zenith BUCG construction of three highways on the island and a cross-channel tunnel costing RM6.3 billion and the South Reclamation Scheme (SRS) with more highways, LRT and monorails costing over RM40 billion were introduced and prioritised.

Instead of implementing Halcrow’s short-term strategies, the state has proposed too many outdated (such as monorail) and poorly integrated public transport systems, which will entail substantial environmental impacts over large areas of the state. Trapped in the old paradigm, these highways and massive infrastructures will not solve public mobility, but rather worsen its prospects, not to mention the lack of financial resources for these expensive mega projects.

Recommendations

Instead of an expensive Big-Bang approach, we propose a holistic-incremental approach based on the following 5 principles:

Principle 1: Formulate a plan according to realistic demographic projections

Principle 2: Adopt a sustainable financial model

Principle 3: One step at a time—an incremental approach

Principle 4: Prioritise public transport, not highway building

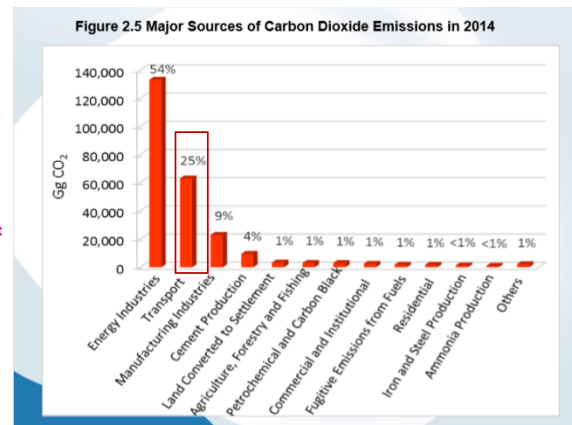
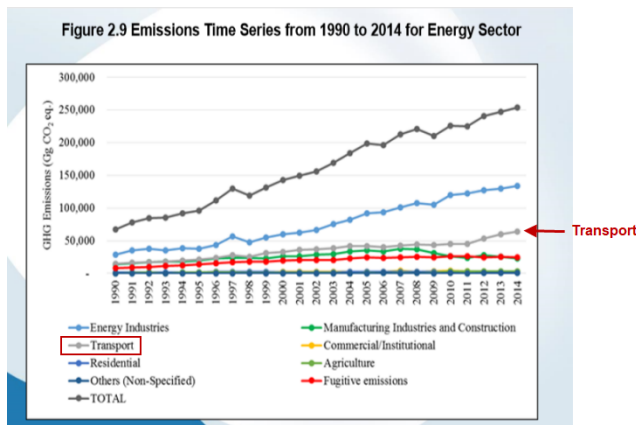
Principle 5: Adopt evidence-based policy which takes into account mobility trends and new technologies

Return to Halcrow’s original transport master plan and start with a focus on institutional and short term, cost-effective measures to reduce traffic congestion. These include low-cost measures, institutional reforms, strict traffic enforcement, more effective parking management system, better pedestrian and cycling infrastructure, water transport and feeder bus systems.

Paradigm shift

The urgent pressure to shift the transport paradigm to greater shared mobility arises from several factors, such as:

- a) traffic jams, which are time-wasting and economically unproductive
- b) high costs of car-dependency (vehicle, fuel, maintenance, parking, etc) which affects low-income people disproportionately
- c) high rate of accidents, unfairly affecting motorcyclists, cyclists and pedestrians, including children
- d) inequitable share of space taken up by car users which could be used for walkways, cycling infrastructure, public space and greenery
- e) negative environmental impacts of expanding road surfaces, such as heat island effect, loss of sponge cover making areas more flood prone, loss of biodiversity etc.
- f) high-traffic roads, noise and traffic pollution, reducing quality of life, and affecting neighbourhoods and streets, negating the rights of people and children to walk and cycle safely and enjoy the health benefits of active lifestyles
- g) carbon emissions arising from private vehicle use, which contributes to planetary climate change



The contribution of GHG emission from transport constitutes a quarter of total GHG emissions in the country in 2014, and the trend shows an increase in GHG emissions from the transport sector particularly in recent years. It is important to improve public transport to reduce, or at least not to further increase, the contribution of GHG emission from the transport sector.

Therefore, a total change in paradigm and mentality is needed in order to come up with future-proof policies and implementation:

1. **Institutional Measures:** Penang's traffic congestion occurs mainly during peak travel hours. The present state government's policy to offer free bus service (pull factor) to reduce traffic congestion is commendable, but they can only work when combined with other institutional measures (push factors) such as creating dedicated bus lanes or high-occupancy vehicle (HOV) lanes for peak hour traffic. Reliability, punctuality and frequency are more important to commuters than free bus rides. Equally important is the need to provide easy first and last mile connectivity through feeder buses, bicycle lanes, safe and shaded pedestrian walkways.
2. **Better Transport Demand Management:** Instead of spending to increase road capacity, look into ways to manage demand, such as imposing (de)congestion charges and incentivising sustainable mobility. Increase pricing of on-street parking system with strict enforcement against illegal parking on roads that are clogging the streets. These would reduce traffic congestion and improve traffic flow in the city significantly. Subsidising Rapid bus fares and improve the frequency and reliability of the ferry service would yield much better results than free bus rides.
3. **Cross-channel connectivity:** Now that Prasarana has taken over the ferry services, work with them to improve the services between the mainland and island (for ferries and buses). There is also a need to upgrade the Penang Ferry on both Pengkalan Raja Tun Uda (Island) and Pengkalan Sultan Abdul Halim (Mainland) with facilities such as escalators and climate control. Another option is to engage KTMB to extend its train service from the Butterworth station across the channel over to the island to further improve connectivity between the mainland and the island.
4. **Concentrate financial resources:** Create a comprehensive and integrated system of mixed grade and elevated BRT on the island and mainland with exclusive, segregated right of way. This can be eventually expanded to include a good rail system. Start with a bus lane along the LCE Expressway.
5. **Introduce real time bus app:** Bus operators to promptly introduce clear and simple-to-read service information for all bus stops as well as computerised real-time arrival info systems for certain strategic stops/terminals. Studies have shown that transparent, easily accessible and less variable service information, including schedules and route, is more effective in generating public confidence and increased ridership, than small increases in frequency. Less frequent but reliable services could be provided in rural areas.
6. **Improve first and last mile connectivity:** Walkways, cycle lanes, and feeder buses are an essential part of the public transport infrastructure. Improve convenience, safety and accessibility for commuters to bus stops (with shelters, seats and lighting) and terminals (with amenities like clean toilets) should be upgraded diligently. Provide/improve park-and-ride facilities for certain strategic locations. Currently such facilities are only provided by KTMB, not Prasarana, MPSP or MBPP.

7. **Road Safety:** Introduce both educational and strict enforcement policies to improve safety for motorcyclists who constitute 30% of transport modal share but record up to 75% of road fatalities!
8. **Complete streets for all:** Instead of continuous widening of roads to cater for private cars, make it a policy that the built environment including roads must also cater for other road users who are vulnerable – motorcyclists, bicyclists, pedestrians and OKUs – using dedicated lanes where necessary. Carry out studies to review current practice of road-widening and adopt, for e.g., a 5-year program to ensure compliance with this policy. Reduce road widths and plant trees to cool down the streets for walkers and cyclists.
9. **Safe cycling for all:** Although the state has done much to encourage cycling, such as introducing bikeshare and bicycle lanes, drastic interventions are still needed to make cycling safe for all, including children. Create ‘Little Hollands’— town centres where walking and cycling take priority over motorized vehicles, with separated bicycle tracks, lower motor vehicle speeds, car-free areas, and stress-free intersections.
10. **Improve public space and pedestrian connectivity:** Turn Penang into a pedestrian-friendly city. Penang is blessed with five-foot ways; unfortunately, most are obstructed. The local government must achieve its own KPI to clear all five-foot ways by 2020 to enable pedestrians to walk safely and comfortably. Adopt a 5-year master plan for all public space in line with Universal Accessibility Policy for personal mobility. Extend car-free days to other suitable locations with a view to encourage more creative outdoor community activities and recreations.

11. Land Reclamation

Background

In the past, land reclamation in Penang was relatively small-scale, hence less ecologically disruptive. Moreover it served a public purpose, e.g. expanding the city limits from Beach Street to Weld Quay (by 1883) and expanding the industrial area eastwards at Bayan Lepas from the 1980s. In the 1990s, however, under the BN administration, a new trend emerged.

- a) Around 1,000 acres of land reclamation rights, originally intended for a Malay township at Tanjung Tokong, were sold to the owners of Sri Tanjung Pinang.
- b) In exchange for building the Lim Chong Eu Expressway, land reclamation rights were privatized, resulting in IJM owning 324.9 acres of shorefront property.

Both these schemes allowed developers to make huge profits.

After 2008, the DAP-Pakatan administration continued doing massive swap deals:

- 110 acres of prime reclaimed land off the coast of Tanjung Tokong and Gurney Drive to be gradually given to the developer of a RM6bn tunnel and three highways,
- three islands, covering 4,500 acres, would be created to finance the RM46bn transport infrastructure (including the tunnel and three highways) proposed by SRS Consortium (Refer to section on the Penang Transport Master Plan).

These swap deals create regulatory confusion, potential conflicts of interest and problems with land valuation into the future.

Issues

Land reclamation comes with high environmental and social costs that we will have to bear into the future. It has destroyed large areas of mangroves, damages the coastal ecology, causes siltation and requires maintenance dredging, which itself will negatively impact the coastal environment. An example of this is Gurney Drive where siltation from the Straits Quay reclamation created mud flats and destroyed the beach.

Land reclamation also threatens marine biodiversity. In recent years, carcasses of dolphins have been found around the Tanjung Tokong reclamation site, in neighbouring Tanjung Bungah, at Penang port and even in Bagan Ajam on the mainland, directly opposite Tanjung Tokong. The EIA report for the Gurney reclamation did not mention dolphins. Siltation is smothering certain species such as giant oysters at the Straits Quay Marina.

The social costs are the loss of marine fisheries and fisherfolks' loss of livelihood. Often, proponents of reclamation say that marine fisheries can be replaced by aquaculture farming. Aquaculture farming however comes with risks to human health, i.e. the use of antibiotics, and pollution side effects.

Therefore, there have to be extraordinary, compelling circumstances to justify sacrificing fisheries and loss of food security to make way for land reclamation. Land reclamation cannot be justified if it is mainly to build high-end property for a wealthy minority, whether local or foreign.

Recommendations

Justify the need for the reclamation project

1. Come up with proper land use planning

There must be a strong public interest element in determining whether to reclaim land. The state has to carry out proper land use planning, management, and supervision for the reclaimed land, and to ensure that public needs are met, for e.g., genuinely affordable housing (home price to annual income ratio of not more than 3), public parks, public schools, and food security. Land reclamation rights should not be sold *en bloc* to developers to determine how the land should be used because the developers' interests are not the public's interests.

2. Use realistic population projections when deciding if land reclamation land is necessary

The need for land reclamation must take into account realistic population projections given that the total fertility rate in Penang has fallen well below the population replacement level i.e. below 2.1 and given there has been only a small net inward migration over the years. Also much of the population increase in Penang in the future is expected to be on the mainland.

3. Seek independent EIA consultants and hold them accountable

The required EIA and DEIA for reclamation projects must not only be independent, but must be *seen* to be independent. In reality, the independence is lacking. Consultants whose remuneration comes from the developers will tell the developers what they want to hear. Following international practice, the developer should deposit the funding for the EIA or DEIA study into the state or local authority's coffer; but the consultant should be selected and appointed by the local authority through an open process. This would solve significant conflict of interest issues. The EIA consultants who have given the green light for reclamation must be held accountable if the actual social and environmental impact of the project turns out to be worse than what they had forecasted. They should not be allowed to hide behind clauses providing for a long list of mitigation measures.

4. Consider climate change and water supply constraints

All land reclamation needs to take into account rising sea levels for the next hundred years and beyond and potential water supply constraints in the future. This is especially crucial given the extensive logging carried out in the Ulu Muda water catchment area.

5. Stop creating artificial islands

The recent trend of creating large artificial islands must be stopped. These islands are planned by developers presumably so that they can maximise the number of expensive ‘sea-view’ homes which can be sold at high prices. Artificial islands are more likely to encroach into established fishing grounds. Instead, land reclamation, if justified, should be along the coastline and on a scale that does not significantly disrupt tides and currents or create excessive siltation. If reclamation is on a smaller scale along the coast, it could allow for fishing activities to co-exist in harmony with other land use.

After the reclamation

6. Guarantee public access to the entire beachfront on reclaimed land

Under the National Land Code, all beaches are public. They cannot belong to developers. Therefore the public should be provided access to the beaches. As such, waterfront houses on reclaimed land are illegal. All developments on any reclaimed land should recognise this.

7. Treat reclaimed land as leasehold land to cool property prices

There is a strong case for reclaimed land to be treated as leasehold land under the National Land Code. Under sections 5, 49 and 51, it is clear that any land below the shore-line (which includes foreshore and sea-bed) is state land. Section 76 was amended by Parliament in 1985 by the insertion of a proviso to expressly prohibit the state from disposing “any part of the foreshore or sea-bed for a period exceeding ninety-nine years”. Treating reclaimed land as leasehold land will help to cool down pressure for high-end property development and speculation for private profit. (Please note that the granting of freehold status at the Queensbay reclamation was a unique case due to the 1997 financial crisis and should not be made a precedent.)

8. Compensation for loss of marine fisheries and fisher folks’ loss of livelihood

Where fisherfolks lose their livelihoods, they should be granted compensation that reflects their loss of income. Developers should also compensate the state for loss of future fisheries based on the rising price of fish and seafood. But this is tricky as cost-benefit is very hard, and usually impossible, to determine. The question is what compensation is “enough”? Where are the boundaries as to who should be compensated? If these boundaries and limits cannot be agreed on, how can reclamation still go on?

9. Independent studies of previous land reclamation sites

Independent studies must be carried out on previous sites, for e.g., the first phase of the Seri Tanjung Pinang reclamation, to study the impact of beach erosion, sedimentation and siltation, and change in tidal patterns in surrounding areas after the reclamation.

10. Developers should pay for all dredging costs in the future

On islands that have already been created and other large-scale reclamation that has already been done, developers, who stand to make billions in profits, should compensate the state for any resulting siltation and dredging that may be required, even outside the immediate area of the

reclamation. This compensation should extend into the future, instead of only for a limited number of years.

Going into the Future

11. The state must cease doing swap deals

Swap deals selling or giving away reclaimed land in exchange for infrastructure or other projects should be stopped for three reasons:

- a) Regulatory confusion: Swap deals create all kinds of regulatory confusion and conflicts of interest. For example, in reclaimed land-for-transport infrastructure swap deals, what will happen if the developers' plans are not approved? Who will pay for the transport or other infrastructure costs on the other side of the swap deal then?
- b) Land valuation problems: Swap deals create a problem of how to value the reclaimed land, because the land will only be used well into the future. Value the land too low and the state and public lose out. Value the land higher and it drives up the present value of land. Approving high-density development on reclaimed land in exchange for building expensive transport infrastructure will also drive up the price of land. This will have effects on land across the state, making it even more costly for people to buy houses.
- c) Too much land reclamation: Swap deals push the state into larger-than-necessary land reclamation. For instance, the massive 4,500-acre 'three islands' land reclamation project in southern Penang Island that is 'swapped' for the SRS Consortium's transport plan would not be necessary if Penang adopted a better, cheaper, quicker and sustainable transport plan (refer to section on Penang Transport Master Plan).

Moreover, Penang is not short of land. For example, there is still land available on the mainland, as reflected by the PDC calling, for the third time, for an RFP for a theme park and mixed development on 127 acres of Batu Kawan land. Redirecting development to this available land would help Penang achieve a more balanced development between island and mainland.

12. Environment, Natural Resources and Climate Change

Environment, Economics and Sustainable Development

Economic development, job creation, etc. are important but have to be balanced with environmental concerns and quality of life.

What is required is a paradigm shift and transformative commitments by the state which puts the environment in the centre of economic thinking, and for true sustainable development to take place. This means:

- i. The ecology and the quality of life of people have to be prioritised in state planning processes & reflected in the Penang Structure Plan, local plans, density and plot ratios, hill and coastal conservation, transport policies etc.
- ii. Recent severe floods & landslides are evidence of both climate change effects and imbalances in development. There is serious need to review policies and re-balance priorities to achieve a truly green agenda.

Respect for and implementation of International Environmental Agreements

The environmental and sustainable development related agreements Malaysia has signed on to should be taken seriously and implemented at all levels of government: federal, state and local. These include international agreements such as the Sustainable Development Goals (SDGs), the New Urban Agenda, the Convention on Biological Diversity, the Sendai Framework for Disaster Risk Reduction, the United Nations Framework Convention on Climate Change (UNFCCC) and Paris Agreement.

- i. They must be translated into action at the federal, state and municipal levels through (1) plans (2) policies (3) policy measures and (4) implementation. This may initially cost money, but it will be repaid many times through bigger savings. For example, if hills are conserved, water supply to reservoirs will be stabilised or increased and floods will lessen. This will save the state of billions of ringgit of having to control serious floods or to find new water sources.
- ii. The global agreements can also provide much needed funds to the state provided the state shows it is serious in implementing environmentally sound policies, such as the Green Climate Fund. They also are a rich source of information and analysis of environmental

and social problems, and of solutions. Moreover, as we signed these agreements, we are obliged to implement them.

- iii. All the international agreements stress importance of strong and effective engagement with stakeholders, especially public participation in decision-making and planning.

Climate Change

Penang is already facing climate changes such as a prolonged drought in 2016 and more frequent and intense rainfalls are predicted to be the new normal by experts and scientists.

Penang Island in particular, due to it being an island, is especially vulnerable to climate change impacts such as sea-level rise, storm surges, vulnerable coastlines, etc. In view of this:

- i. Due attention must be given to climate change issues in Penang by policy makers and legislators, especially through integrating climate change measures into policies, strategies and planning.
- ii. Greater political and public awareness must be raised about climate change issues and the need for action through improvements in institutional capacity and education on climate change.
- iii. Effective plans and actions are needed in reducing carbon emissions in the state and in taking adaptation measures so that people and communities are better informed and prepared for the adverse effects of climate change.
- iv. Improvements must be made to ensure proper systems and plans are in place for effective disaster preparedness and response in the event of climate related disasters.
- v. Instead of lamenting about the lack of financial resources from the federal level, the state must be proactive in seeking international funds that exist, such as the Green Climate Fund, to support climate change actions to move to low carbon development and to build resilience and adapt to climate change impacts.

Water resources

The state must ensure that our water resources are available and sustainably managed. This can be done by adopting the following measures:

- i. Improve water quality, reduce pollution, minimise hazardous chemicals, increase recycling, promote safe re-use of water.
- ii. Increase water-use efficiency including through proper demand-side measures being taken with proper pricing policies that promote water conservation and sustainable use.

- iii. Ensure sustainable supply of water, all measures must be taken including through cooperating with neighbouring states in the protection and restoration of water-related ecosystems, including forests, wetlands, rivers, aquifers, lakes, as well as in promoting rain-water harvesting.

Seas, Coastal Zones and Marine Resources

There is need to conserve and sustainably use the seas and marine resources and to protect the coastal zones, including the beaches. This requires:

- i. The prevention and reduction of marine pollution, especially from land-based activities.
- ii. The protection of marine/coastal ecosystems including the beaches, to avoid adverse impacts, strengthen their resilience, take restorative action such as in rehabilitating and regeneration of mangrove forests and in preventing coastal and beach erosion.
- iii. Halting further land reclamation activities.
- iv. Ensuring that inshore and small-scale fisherfolk have sufficient access to marine resources to sustain their livelihoods.

Protection of terrestrial ecosystems

There is serious need to protect, restore, promote terrestrial ecosystems, sustainably manage forests, halt land degradation and biodiversity loss. This can be done through the following:

- i. Ensure the conservation, restoration and sustainable use of terrestrial and inland freshwater ecosystems and their services especially forests, wetlands, hills and highlands, including the continued protection of protected areas and the creation of new ones.
- ii. Sustainably manage forests, halt deforestation, restore degraded forests and increase afforestation & reforestation.
- iii. Restore degraded lands and soils (including those affected by floods).
- iv. Take urgent action to reduce degradation of natural habitats and halt biodiversity loss and extinction of threatened species.

Ensure sustainable consumption and production patterns

Ensuring sustainable consumption and production patterns is an important goal for the rational use of resources and in maintaining a healthy quality of life for our people. This can be done by:

- i. Promoting the sustainable management and efficient use of natural resources.
- ii. Ensuring environmentally sound management of chemicals and all wastes throughout their life cycle and significantly reducing their release to air, water and soil in order to minimize their adverse impacts on human health and the environment.
- iii. Substantially reduce waste generation through prevention, reduction, recycling and reuse and moving to zero waste.
- iv. Take measures to reduce food waste.
- v. Encourage companies to adopt sustainable practices and to integrate sustainability information into their reporting cycle.
- vi. Take effective actions and measures to prevent companies from continuing to pollute and cause environmental damage and nuisance to their neighbourhoods.
- vii. Promote and educate the public on the need for sustainable and ethical consumption, including in promoting practices and lifestyles that are in harmony with nature.
- viii. Increase scope of sustainable waste management through innovative practices, valuing and encouraging private, individual and community efforts in recycling.
- ix. Ban the use of one-time use disposable plastics, setting the example at government canteens and declaring all state-sponsored/endorsed events plastic-free.

13. Hill Land Policies

Background

The Penang Structure Plan 2020 that was gazetted in 2007 prohibits development on “hill land”, defined as land 250 feet/76 metres or more above sea level, or on slopes steeper than 25 degrees, except in the case of “limited development for special projects” (pembangunan secara terhad bagi projek istimewa, DK3 L4/4-114).

This requirement is more stringent than other states in Malaysia because Penang is an island and topographically different. The base elevation of the plains of Penang Island is low (a few feet to more than 50 ft above sea level in George Town) compared with places like the Klang Valley which are situated at higher elevations (ranging from 50 ft to over 200ft above sea level).

Nevertheless, despite the gazetted prohibition in the Penang Structure Plan, the State Planning Committee approved 56 high-rise housing blocks on hill land between 2008 and 2015.

Example 1: The MBPP approved Sunway’s proposal to construct 600 units of high-rise apartments and bungalows on hill lands covering 80 acres in Sungai Ara, approximately 43% of the area being on slopes exceeding a gradient of 25 degrees. This decision has been challenged by Sungai Ara residents; and the Appeal Board in January 2016 upheld the objections of the residents. However, the developer appealed against the Appeals Board decision in the High Court which ruled in favor of the developer. The case is currently pending appeal by the residents in the Court of Appeal.

Example 2: The proposed project of 4 blocks of super high-rise apartments of between 41 to 47 storeys in Bukit Kukus, Paya Terubong, faces strong objections by the residents, and the hearing by the Appeal Board is in progress. Among the objections are no valid EIA, the hill has denuded and destabilized resulting in incidents of land slides, repeated mud slides and mud overflow onto the service road of Taman Lau Geok Swee and Taman Sri Rambai, causing serious inconvenience and losses to the residents.

In December 2015, Penang Forum organized a well-attended half-day forum on “Save Our Hills” and issued a declaration to that purpose. We followed this up in October 2016 by launching the Penang Hills Watch (PHW), a digital platform that enables citizens to report on hill clearing. These reports are summarised and submitted quarterly to the state and local governments for action.

The earliest case of hill clearing reported to the state government—in January 2017—was the Granito Project in Tanjung Bungah. Unfortunately, the government did not take adequate action. Subsequently, in October 2017, a tragic landslide occurred on this site, killing at least 11 people.

Issues

1. A large number of hill land projects have been granted approval by classifying them as ‘limited development for special projects’ and hence circumventing the Penang Structure Plan prohibition. ‘Limited development for special project’ exceptions should only be applicable to essential public service projects and not private development projects, whether for housing or other purposes (please see section in this report on Planning for Sustainable Development). Furthermore, there are cases where approval is given for very high density housing.
2. Already approved, on-going hillside projects need to be continuously and properly monitored.
3. Hill destruction has risen from both legal and illegal hill clearing by farmers and developers. The high number of illegal hill cutting reflects ineffective monitoring and prosecution of offenders. Furthermore, illegally cleared hill land are inadequately rehabilitated.
4. Offenders of illegal hill cutting who have been prosecuted were charged under the Street Drainage and Building Act and penalized with a relatively light fine as the maximum fine is only RM50,000. Although the offenders could be charged under the Town and Country Planning Act which carries a maximum fine of RM500,000, very few offenders have been so charged. None have ever been punished with imprisonment although both the Acts provide for a fine and/or imprisonment. The Town and Country Planning Act in fact further provides that if a company commits the offence, its director, manager, secretary or similar officer *shall be deemed* to be guilty, unless he proves that the offence was committed without his knowledge or that he took reasonable precautions to prevent its commission.
5. Some ‘hill land’ have been removed from the Land Conservation Act 1960 and zoned for housing under the Planning & Development Control Policy Plan 1996 (*Pelan Dasar*).
6. The 2009 Guidelines for Special Project are not congruent with the state Structure Plan because the definition of ‘limited development for special projects’ in the Structure Plan was expanded in the Guidelines to include housing projects zoned under the Planning & Development Control Policy Plan 1996 (*Pelan Dasar*).
7. The Penang Guidelines for Hillside Development 2012 is not effectively implemented.

Recommendations

1. A moratorium on all development on hill land (as defined in the Penang Structure Plan) unless it is for essential public services.
2. More effective enforcement and monitoring of work on hill site projects.
3. More stringent prosecution of persons involved in illegal clearing and cutting of hill land whether for agricultural or other development purposes.
4. Hill land which has been previously cleared for stalled developments should be quickly restored to prevent mudflows during floods with potential natural disaster of massive land slide with potential risk of human casualties.
5. Follow up action to restore illegal clearing and cutting on Bukit Relau (Botak Hill) and legal action against the developer for failing to do it.
6. The rezoning of all ecologically & environmentally sensitive hill land from 'housing' purpose under the Planning & Development Control Policy Plan 1996 (*Pelan Dasar*) back to 'hill land' and the gazetting of such 'hill land' under the Land Conservation Act.
7. Review the definition of 'limited development for special projects' under the Guidelines for Special Projects and restrict it for essential public services only. (Refer to the chapter on Planning for Sustainable Development)
8. The gazetting and implementation of the Local Plan for Penang Island after proper consultation with the public.

14. Floods

Background

Flash floods are increasingly becoming a bane in Penang in recent years. Among the recent incidents are:

- a) Flash floods on 5 September 2015 that deluged the Paya Terubong valley due to overflow of the retention pond
- b) Flooding on 18 July 2016 which resulted in the closing down of the Penang International Airport
- c) Flash floods on 15 September 2017, which caused mudflow from a collapsed retaining wall that buried cars in Fettes park
- d) Widespread flooding and landslides on 4–5 November 2017, which wreaked widespread havoc throughout the state, paralyzing transportation networks, damaging property, disrupting daily activities and depressing productivity.

All these unfortunate events came as a shocking revelation of how vulnerable and ill-prepared Penang is to disasters of such scale, and continue to cause great anxiety among many Penangites at each heavy downpour.

Issues

On 29 October 2017, Penang Forum held a public forum to report the findings of a desk study documenting and mapping the incidence of flash flood events and corresponding daily rainfall events over a 17-year period from 2001 to 2017. The study concluded that flash floods in Penang are happening more frequently and at lower rainfall thresholds and that flooding hot spots have emerged further upstream in the major river basins, corresponding with the expansion of urban development areas. The flood situation is bound to worsen if climate change brings more intense rainfall.

Floods, in particular flash floods, result from excessive rainfall runoff especially over surfaces that are paved and rendered impermeable to rainwater infiltration into the ground. Flood waters that flow and accumulate downstream overwhelm the capacity of existing urban drainage in the heavily built-up areas of the flood plains of George Town and the new conurbations in the Relau–Bayan Lepas area. A similar situation occurs in Seberang Perai with rapid urban expansion beyond the Butterworth and Bukit Mertajam townships.

Costly structural measures for flood mitigation are reactive, defensive and recursive, and grossly inadequate as the main response to combat the burgeoning flooding problem of Penang.

Emphasis ought to be given to flood prevention measures that can reduce rainfall runoff at source, soak up floodwaters and allow more natural flow of waterways to alleviate flooding in the first place.

Recommendations

Penang Forum urges the authorities to look into the following:

1. Proper land use planning and development control that take account of hydrological flows and drainage implications beyond individual development projects;
2. Stringent monitoring of development projects for compliance with guidelines such as the Penang State’s “Safety Guidelines for Hillside Development 2012” (<http://www.mbpp.gov.my/sites/default/files/penangsafety1409.pdf>) and the Malaysian Department of Irrigation’s “Urban Stormwater Management Manual for Malaysia”, now in its second edition (http://jps.vox10.com/jps/resources/PDF/MSMA2ndEdition_august_2012.pdf);
3. The spearheading of a ‘sponge city’ initiative (e.g. <https://www.citylab.com/design/2015/11/why-china-wants-to-build-sponge-cities/417114/>) to increase sponge areas with targets to
 - a) reduce rainwater runoff and increase absorption into the ground through infiltration (green spaces, green roofs, wetlands, rain gardens, permeable pavings)
 - b) capture and re-use rainwater through harvesting and retention infrastructure, thereby reducing the high per-capita potable water consumption of Penang
 - c) rehabilitate denuded hill slopes and upstream areas, maintain green river reserves and wetlands while preventing encroachment, and preserve and restore rivers to their natural courses
 - d) conduct departmental reviews within state agencies and city councils, of current ‘business as usual’ practices which generate more impervious surface cover, such as constant road-widening, paving over grass turf, and the creation of large open car park areas
 - e) tarring without milling which raise road levels above that of adjacent houses, covering drains without adequate measures for keeping the covered drains unclogged
4. The implementation of disaster alertness, preparedness and response systems with effective public communication – learning from the experience of the Selangor Disaster Management Unit (<https://www.youtube.com/watch?v=PPaCzg2LOgE>)
5. Public awareness and education to heighten civic consciousness and incentives to make urban spaces more “spongey”.

15. Mangroves

Background

Much of Penang Island's coastlines were originally covered by diverse mangrove forests. From historical topographical maps, we can tell that development only started to encroach into these virgin forests in the 1970s when shorelines were prepared for human settlements. By the year 1980, almost all the mangroves on Penang Island's south east coast were destroyed to make way for the construction of the free trade zone.

Today, Penang's mangroves continue to face the threat of destruction. Mangroves have been destroyed for shrimp farming, urbanization and infrastructural development activity (e.g. road building, housing) On the west coast of Penang Island—in Permatang Pasir, Sungai Burung, Pulau Betong and Balik Pulau—the remaining mangroves are increasingly being destroyed for aquaculture activities. On the east coast, only small patches can be found at the dump site along Jelutong Expressway and at the river mouth of Sungai Kluang. In the south central part of the island, only a small area of highly diverse mangroves remain.

On the mainland, human settlements and industrial construction continue to sprawl into mangrove areas. The encroachment by a mega development project in Batu Kawan and encroachment in Teluk Air Tawar by aquafarming are of particular concern. Daerah Selatan around Batu Kawan has the largest area of mangroves. These mangroves are currently being maintained only because of sediment suitability, and by transplantation and replanting projects carried out by companies.

Issues

Mangrove forests are very dynamic and highly productive ecosystems which are home to a large variety of marine life, and serve as nurseries for many fish species. They can be important bird sanctuaries, such as the mangroves north of Teluk Air Tawar on the mainland. Mangroves protect shorelines from damaging storms and strong winds, waves and floods, help to prevent erosion, protect against rising sea levels, and maintain the water quality of the area. The destruction of mangroves affects local food webs, supply chains, water quality, and will ultimately impact on urban costs of living and quality of life.

The value of mangroves is not fully appreciated, and therefore mangrove forests are sacrificed, neglected, and not cared for. For example, in some state-led flood mitigation measures, artificial walls are built by clearing mangroves and nipah palms that act as natural barriers in the face of storm surges and coastal flooding. This is counterproductive because the clearing of the

mangroves worsens the flooding problem, which is supposed to be mitigated by the artificial wall. In some areas, mangroves are being treated like wasteland or residual dump sites for household garbage and other industrial waste, and as unproductive land that serve as breeding sites for mosquitoes and other vectors.

There is on-going conflict between the developers and the coastal communities whose livelihoods depend on mangroves. In the last two decades, this conflict has become more apparent with coastal development rapidly encroaching into fishing grounds and affecting sources of income. Fishermen now travel further out to sea to look for catches, incurring higher expenditure on diesel and boat maintenance. The developers' efforts to provide compensation and small grants are seen as trivial, limited and hardly enough for long term sustenance.

Policy-related discourses on redressing these challenges remain contested. Off-site replanting is often piecemeal and insufficient to address the urgency of the pace at which mangroves are being cleared. Existing legislation (e.g. Forestry Act, Wildlife Act, etc.) was put in place for natural resource exploitation as opposed to protection for the sake of preservation. Existing land zoning creates legal ambiguity and lack of clear institutional jurisdiction.

Recommendations

Stop cutting down mangroves

1. Prohibit the clearing of mangrove areas and conserve all remaining sites. All mangrove areas should be gazetted as Permanent Reserve Forest and preserved.
2. Revise and promulgate environmental legislation to include mangroves within conservation laws and policies at the national, state and local levels.
3. Government policy should protect mangroves from encroaching urbanization and change of land use, for e.g., reclamation, development, dumpsite, or aquaculture. Local authorities should consider mangroves an important part of urban biodiversity and integrate them into an overall sustainable development and urban resilience policy.
4. In Seberang Perai, the setback required for any development around mangrove forests should be increased from 40 metres (as currently practiced) to at least 100 metres. Cancel the TOL lease of the land in Telok Air Tawar and rehabilitate the area with mangrove seedlings.

Protect all remaining mangroves

5. All stakeholders and collaborators should coordinate their activities to protect all remaining mangroves. These should include the state government, state executive councillors, Forestry Department, Land Office, Wildlife Department, the local councils (MBPP and MPSP), LKIM (Lembaga Kemajuan Ikan), Fisheries Department and the DOE (Department of Environment), as well as academics and civil society organisations.

6. The state should allocate a dedicated budget for mangrove conservation and research.
7. Promulgate guidelines for the sustainable use of mangroves in relation to fishing, logging and ecotourism. Entrance into mangrove areas should be governed by guidelines on capacity, appropriate behavior, and regulation on number of boats, visitors, etc.
8. Protect mangroves from effluents, noise and fuel pollution from a high density of boats. Protected areas should include mud flats which are important bird feeding grounds for birds.

Plant more mangroves

9. Penang needs a master plan for mangrove planting. Identify priority mangrove areas for planting and conservation with the aim of demarcating a gazetted biosphere area to be incorporated into the Structure Plan and the Local Plan. The reserve should contain a core zone, buffer zone and development zone. Replanting programs need to be based on scientific knowledge about the right mangrove species and the suitable sites.
10. Involve fishermen groups and the Penang Inshore Fishermen Welfare Association (PIFWA) in planting and replanting processes to ensure sustainability of activities. Example of such efforts can already be seen at the mangrove replantation center in Sungai Acheh, Nibong Tebal, which has been very successful and often engaged by private local and international MNCs to fulfil corporate social responsibilities.

Change public vision

11. Appreciation of mangroves needs to be instilled at all levels of society, from small coastal communities to cities, including government, private agencies and the public. Change public perception of mangroves, and disseminate information about the value of mangroves and their importance for people's livelihood, health and well-being, as well as for wildlife and endemic species.
12. Create a Mangrove Educational Center on the island (there are presently two on the mainland), to be managed by the local authority as an education park with proper facilities.
13. Strengthen the power of local users, i.e. those whose livelihoods depend on mangroves, in preserving and disseminating local knowledge. Conduct communal education with a focus on highly urbanized communities towards self-reliant community action groups in identifying local species, replanting, and strengthening local practices of communal service, as well as integrating more formal corporate social responsibility (CSR) initiatives.
14. Conduct research into initiatives that increase the sustainable use of mangroves, such as developing and introducing mangrove products, e.g. nipah juice, jams.

16. Pulau Jerejak

Background

Pulau Jerejak is the largest of Penang Island's five islets and has significant history and rich natural heritage. It was the site of the very first purpose-built leprosarium in the Strait Settlements as well as the site of two historic quarantine stations through which more than 1 million immigrants passed into Penang and the Malay Peninsula. Apart from this it had also served as a Tuberculosis Sanatorium, a maximum security prison from which it gained the moniker 'Alcatraz of Malaysia'. More recently, it was the site of the Jerejak Rainforest Resort.

In late 2016, it was announced that Pulau Jerejak will be redeveloped as part of a mega development scheme where 1200 residential units, five star hotels, a marina, a theme park and a bridge connecting Penang Island to Pulau Jerejak would be built. The permanent forest reserve/state park which was slated to cover 295 hectares of Pulau Jerejak has been pending for gazettelement since 2007. Penang Forum has raised awareness about the importance of Pulau Jerejak through a forum organized in April 2017 where four speakers shared the natural and historical significance of the island through a series of presentations.

Issues

Penang Forum is concerned about:

1. The lack of public consultation in carrying out the mega redevelopment scheme for Pulau Jerejak.
2. The negative impact such a development might have on various historic sites and graves on the island.
3. The delay in gazetting the permanent forest reserve/state park on Pulau Jerejak.

Recommendations

1. Preserve and restore existing historical sites (Quarantine Station, Leprosy Camps, Prison and Camp 1 Catholic Church) as well as multi-religious (Muslim, Christian, Buddhist and Hindu) graves on Pulau Jerejak, some which require immediate safeguarding and stabilisation.
2. Commission a development master plan for Pulau Jerejak, placing special emphasis on its historical, cultural, social and environmental significance.

3. Commission a biodiversity survey of Pulau Jerejak and gazette the forest reserve/state park and allow access to the public to enjoy low impact recreational activities (for e.g. hiking)
4. The State Government should engage with the developer and civil society to chart a development plan which is sensitive to the cultural, historical and environmental significance of the island.
5. Declare Pulau Jerejak a State/National Heritage Site, working towards the joint inscription of Pulau Jerejak and Sungai Buloh as World Heritage Sites.
6. No bridge connecting Penang Island and Pulau Jerejak.
7. No theme park.
8. No reclamation around Pulau Jerejak.

17. Urban Forestry

Background

Urban forestry, which concerns the care and management of trees in urban settings, is an important concept in complementing built landscapes and structures in any development or city. Urban and peri-urban forests could be considered the “green infrastructure” of the city. Trees and shrubs not only enhance the aesthetic values of the area, but improve the quality of life in many other aspects. Since the 19th century, the Penang Botanic Gardens has provided trees to the Municipal Council of George Town for roadside planting, resulting in beautiful avenues of Angsana along Macalister and Western Road, and the Royal Palm avenues of Gottlieb Road, Codrington Avenue and Peel Avenue.

The environmental and ecological benefits of urban forestry help to mitigate some of the negative impacts of urbanization:

1. Mature trees lining avenues and roadsides can help ameliorate the effects of urban heat island, pollution and traffic calming, and provide respite from the tropical heat in the city.
2. The microclimate in urban green areas creates a sustainable habitat for urban and sub-urban fauna, including crucial crop pollinators such as bats, birds and bees.
3. The expansive canopies and root system of mature trees in urban areas serve as a break and sponge to absorb excessive runoffs during downpours, and stabilise the soil.

Issues

Urban forestry is currently managed by several agencies including MBPP, JKR, TNB and PBA, with varying results, lacking coordination and any cohesive and aligned action plan.

In the past decade, many old trees were lost to urbanization and road expansion. Decisions were made to sacrifice some and transplant others. Of the latter group, some trees did not survive the transplanting from Gottlieb Road, Jalan Masjid Negeri, Udini roundabout and Jalan Lembah Permai.

Years of poor management and maintenance has left many roadside trees on the brink of collapse. In fact, during the 4th November 2017 storm, a lot of trees, both old and young, fell and caused severe damage to both public and private property. Upon closer inspection of these fallen trees, it is clear that the trees fell because their root systems were already damaged and their crowns were too heavy.

Recommendations:

1. The State Government should cooperate with the National Landscape Department, engage in the discussion to identify parks and avenues belonging to the Federal Government, and request for joint initiatives to transform these parks and avenues for the benefit of the people.
2. Review Section 35 of Town and Country Planning Act 1976 (Act 172) and make amendments to Paragraph 4 of Section 35(a) of the Town and Country Planning Act 1976 (Act 172) so that (i) a higher fine and penalty can be issued to commercial entities which fell trees without prior permission, and (ii) the required number of replacement trees for each fallen tree is increased.
3. The State Government should develop a State Urban Forestry Action Plan to determine the direction and growth of urban forestry and landscape for Penang. It should provide an adequate supporting budget, consolidate urban forestry management and services by the various agencies, and promote partnership programmes with private and non-governmental organisations
4. The MBPP's Penang Tree Inventory System (PETIS) is an appropriate system adopted by the MBPP to manage its trees. However, the system can be improved to provide relevant and meaningful information for urban forestry management.
5. Current by-laws on tree management and maintenance should be reviewed.
 - a. Ban tree-topping procedures throughout the city.
 - b. Revise the permission for tree felling for girth of trees from 80cm to 50cm.
 - c. Prohibit the use of concrete within a 1m radius from tree bole.
6. Create new urban green projects to replicate the success of street-planting and urban greenery along Carnarvon Street, Weld Quay, Dato Keramat Road and Pulau Tikus in more areas of the city. The creation of green medians not only calms the traffic flow in the areas, but also improves pedestrian volumes. Transform bus stops into green bus stops, integrate jogging tracks and pavers with turf on road shoulders, and create green corridors using the back lanes and alleys within the George Town city centre.
7. Develop a mobile interactive platform, both as a mobile app and a website, for the public to monitor, complain and manage the urban forest in their own areas. Incorporate tree identification, flowering seasons and relevant community events.
8. Community involvement is important to gain buy-in from the surrounding community. Urban forestry projects should encompass elements that engage, educate and empower the surrounding community. That way, the surrounding community can take ownership and protect the trees and shrubs planted in their neighbourhood. Community days and events, educational projects, signboards, heritage tree trails, etc can be established with the surrounding community to protect and manage the urban forestry.

18. Gardens, Parks and Public Open Spaces

The passing of the enactment “Penang State Park (Botanic) Corporatization 2017” on 14 November 2017 raises a number of important issues for the future of Penang. These include the future of the Penang Botanic Gardens, the creation of a system of public parks and gardens, and the need to protect public open space.

THE PENANG BOTANIC GARDENS

The Penang Botanic Gardens (PBG) established in 1884 has been an icon of Penang and is of historical value to the residents and visitors of Penang. Although there have been administrative and development problems since the independence of Malaya in 1957, various attempts have been proposed to rectify the problems. After the international conference held to celebrate the 100th anniversary of the PBG, the-then Chief Minister, Tun Dr Lim Chong Eu, appointed an ad-hoc committee to review the management and development of the PBG. One important outcome of this was the proposal to expand the gardens from 78 acres to 580 acres so that the surrounding forests can be part of the gardens. This would be a natural arboretum of the lowland tropical rainforest ecosystem. The intention was to ensure that the surrounding areas would preserve the gardens from inappropriate development pressure and to maintain the PBG as a botanic gardens. The extension of the gardens was finally gazetted in 2005 after all land issues of the different government departments with property was settled.

An attempt to corporatize the gardens was made in 1993 when a consultant company was commissioned to come out with a plan. However, this was not carried out because of the high cost of corporatization. Fast forward to 2017, and we have before us, the Penang State Park (Botanic) Corporatization Enactment. There are a number of very serious problems with this Enactment.

First, the Enactment is confusing and may be interpreted in various ways. One interpretation is that the Penang Botanic Gardens ceases to exist as a botanic gardens because the Enactment renders it a state park with botanic functions. Second, there is reference to having many state parks, but the latter part of the enactment is concerned with the functions of a single botanic gardens. Third, the Enactment makes some reference to the Singapore National Parks Board (Nparks), but this comparison is not justified because Singapore has separate enactments for the Singapore Botanic Gardens, and for other parks and gardens. Fourth, there was initial shock as the original draft stated that the governing board *should not have more than two persons* with

any expertise in botany or gardens. It was only later, during the state assembly debate, that this was changed to not *less* than two.

Issues

Governance of the corporation

The Enactment provides for a board for the governance of the development and management of the gardens. Nonetheless, the composition of the board in the Penang Enactment is unlike that of other botanic gardens such as the Singapore Botanic Gardens or the Adelaide Botanic Gardens, which is the sister gardens to Penang. The main features in the Penang Enactment are (i) the large number of politicians and civil servants provided for on the board, (ii) the chief minister is chairman of the board, and (iii) the general manager appointed to take care of the botanic park is to answerable to the chairman, not the board. The potential for abuse of power is obvious in such a governing structure as all decisions can be determined by the chairman alone.

Inappropriate development of the Gardens

The Special Area Plan (SAP) was first touted as the master plan for the botanic gardens. Actually the special area plan is part of the local plan and cannot be considered as a master plan for the gardens. The SAP is deficient because:

- (i) it has not identified some of the major issues of the expanded garden such as a JKR road dissecting the gardens, the shooting club, as well as the illegal squatter at the bambusetum (formerly Coronation Camp).
- (ii) the issue of car parking and traffic management has not be addressed, and
- (iii) its design does not follow the 2005 concept of having the new centre of the gardens where the water pond and car park is currently located.

Furthermore, there was a proposal to locate within the gardens, going through the quarry garden, the lower station of a cable car that goes up to Penang Hill. This would be contrary to the stated aspiration of making the PBG into a UNESCO heritage gardens like the Singapore Botanic Gardens, because the main aim of a serious botanic gardens should be conservation and study of plant biodiversity and not tourism which should be of secondary importance. The location of a cable car to Penang Hill would also result in severe traffic problems for the gardens.

Recommendations

- 1) Draw up a strategic plan for the corporatization of the gardens including a financial plan on the corporatization and how the budget is to be met. The sale of land should not be part of the plan. There should be a five-year business plan with details of the cost of development and management of the gardens. This is the standard operating procedure of the Singapore Botanic Gardens and many reputable botanic gardens in the world.

- 2) Following the 2005 concept, the Penang Botanic Gardens are supposed to be a car-free gardens, and therefore, the car park should not be at its center where it is now.
- 3) As a matter of priority, the shooting range should be relocated away from the Penang Botanic Gardens.
- 4) Cancel the plan for having a cable car station located in the Penang Botanic Gardens.

PUBLIC GARDENS AND PARKS

There is a lack of public gardens and parks in Penang, both on the island and in Seberang Perai. Having a system of parks and gardens would make Penang a more livable state and city. In cities and urban areas all over the world, there has been much efforts to have more parks and gardens. For e.g., Singapore has 350 parks and gardens under their NParks system. The Penang Structure Plan 2005—2020 does not address this issue, although the intention has always been for Penang to have more public parks and gardens with the aim of creating a more livable urban habitat.

Recommendations

1. If Penang is to compete with other cities in terms of attracting talent and livability, it should pay attention to development that is in harmony with nature and protection of biodiversity. There should be a master plan for the development of parks and gardens.
2. Develop an action plan for the parks and gardens, including the use, management and maintenance plans.
3. Develop green corridors which incorporate flora and fauna biodiversity, linking parks and gardens in certain areas.
4. Gazette Bukit Panchor, Mengkuang Dam and Pulau Jerejak as state parks
5. Develop ecotourism plans to enhance the utilization of parks, including the Pantai Acheh National Park, the Teluk Bahang forest reserve, Bukit Panchor forest reserve and the Penang Hill water catchment area.

PUBLIC OPEN SPACE

The introduction of public open space which is socially inclusive, integrated, connected, accessible, gender-responsive, environmentally sustainable, is one of the key recommendations of the New Urban Agenda.

Though related to the development of parks and gardens, the issue of public open space should be an issue of planning. The Department of Town and Country Planning in Malaysia (JPBD) have recommended that there should be 2 ha of public open space per 1000 persons as a minimum. In 2009, there was on average only 1.19 ha of open space per 1000 persons in

Malaysia. Urban planning should aim for the increase of public open space especially when more and more people are living in high density apartments.

According the Rancangan Struktur Negeri 2007-2020, every housing development should prepare at least 4 square metres per person or 2 ha per 5,000 persons or 10% open space and recreational space (whichever is more). The developer is obligated to surrender open space to the government. For multi-storey development, the open space requirement could take into account recreational space in the building (sports facilities and so forth). For a multistorey development, at least 10% of the open space required must be provided on land.

MBPP allows the developer to provide open space on ground, on podium roof top and in between the floors of buildings. Over the years this has led to a loss of landed public open space and much of the new open space is not accessible to those living outside apartment blocks.

The UN Food and Agriculture Organization recommends that each person should have a minimum of 9 square metres of public open space. For sustainable cities, the ideal amount of public open space for sustainable development should be higher, up to 60 square metres per person. The World Health Organization (WHO) has also specified that for the mental health of individuals the minimum of public open space should be 12 square metres per person. The recommendations of Habitat 3 in Urban Sustainable Development 2016 are higher than the FAO and WHO figures. Distribution of open space is just as important. WHO recommends that, as a rule of thumb, urban residents should be able to access public green spaces of at least 0.5–1 hectare within 300 metres' linear distance (around 5 minutes' walk) of their homes. There are currently no reliable figures of the open space in Penang but it is definitely much lower than the FAO and WHO recommendations.

Recommendations

1. The local councils should carry out an inventory of public open spaces, and publish this for public use.
2. Review the provision for public open space per person upwards to standards set by international bodies such as FAO or WHO.
3. Community engagement and partnership to maintain and enhance the use of public open space, including rental of plots for urban farming
4. Abolish the practice of accounting where roof gardens, open decks or open spaces within a development's gated compound is counted as public open space
5. Create digital resource platforms for community engagement, including options to complain and monitor happenings within a public open space.

19. Prangin Canal

Background

Dating from 1804, the Prangin Canal has marked the southern boundary of George Town. In the nineteenth century, small boats would dock in the Prangin Basin and even smaller sampan would bring goods upstream as far as Transfer Road. The Prangin Market was a wet market and centre of wholesale trade supplying shops in Beach Street, Prangin Road and the Carnarvon Street area. Schools, cinemas and bus stations lined the canal. The socio-cultural significance of the Prangin Canal is manifested in the strong social memory of this area.

With the KOMTAR development, the eastern end of Prangin Canal (Sia Boey) was acquired by the government for KOMTAR Phase 5 development, to be undertaken by the Penang Development Corporation (PDC), and the shophouses were decanted. In the year 2000, the more-than-century-old market was moved away leaving the site empty and awaiting redevelopment. The only open section of the Prangin canal was left as an open sewer and dumping site.

The potential of the Prangin Canal as a green lung for George Town became obvious after the listing of George Town as a UNESCO World Heritage Site. In 2012, the area was proposed as a public park. In July 2015, the state government announced the Penang Heritage Arts District (PHAD), which included the conservation of the Prangin Canal, a row of 22 heritage shophouses and the Prangin Market, and the development of a world-class art gallery, with a launch in September.

But before the end of the year, these plans were already superseded by the more ambitious Penang Transport Master Plan (PTMP), which designated the Prangin area as a transport hub for two elevated monorail lines and one elevated LRT line.

As part of the Penang Heritage Arts District plan, work on the diversion of the exiting canal started in August 2015. The contractor uncovered an underground structure in October 2015, which was suspected to have historical significance. The Universiti Sains Malaysia (USM) archaeological department carried out an emergency archaeological investigation of the site, uncovering an intact canal lock and bypass, possibly the only one surviving in Malaysia. The National Heritage Department took an interest in the archaeological site and in May 2016, instructed PDC to commission a formal archaeological investigation.

Meanwhile, the plan for the transport hub continued apace. The art gallery was to be relocated. Penang Forum was concerned that the development of the transport hub would jeopardize the cultural significance of the Prangin Canal site and wrote to UNESCO about these concerns.

In March 2016, USM commenced archaeology on the site and held a public site visit in August. Meanwhile, the National Heritage Department held a meeting with State agencies to update itself on the findings and plans for the site. Phase 2 archaeology uncovered a larger section of the basin wall, and artefacts such as ceramics that demonstrated the rich historical value of the site. The Prangin Canal site was taken over by George Town World Heritage Incorporated. Subsequently the proposed transport hub was relocated to a site nearer to Magazine Road.

Issues

The condition of the heritage shophouses, market and canal is deteriorating and no heritage management plan has been announced for their preservation. The archaeological site is not being maintained or stabilised and is left exposed to weathering. The shophouses need to be urgently restored as the bracing is meant to be temporary and portions of the wall have already collapsed in the last two years. Current traffic plans do not enhance the potential of the site and will likely undermine it.

Recommendations

The National Heritage Department should submit a revised boundary for the George Town World Heritage Site, to include the Prangin Canal and both sides of the former Bounds Ditch along Transfer Road, with an appropriate buffer.

The state government should, in consultation with Penang Forum's heritage activists – who had played important roles in submitting the original UNESCO world heritage site application that led to its success in 2008 – draw up a holistic development plan which takes advantage of its economic potential and its rich historical, socio-cultural and landscape values.

This plan should include the following objectives

1. To landscape the larger canal site into an attractive public park and city park to serve the population that live and work in the surrounding area, as well as a visitor attraction.
2. To showcase the canal as an archaeological site within the park by preserving and displaying the canal remains, complemented by an interpretative display of the history of the canal and its context.
3. To carefully restore and rehabilitate the 22 shophouses for the interpretation centre, commercial and retail use, including food and beverage outlets, to complement the canal park visitor attraction.
4. To carefully restore the Prangin Market and to explore new sympathetic uses for the market building.
5. To traffic calm the area around the Prangin Canal park.
6. To gazette the Prangin Canal site as a park/open space to prevent any future unrelated development.

20. Heritage

Penang is known for its multicultural port city of George Town, and its scenic cultural landscape of hills and coastline. It boasts a large collection of historic mansions and shophouses, found in almost every part of the state. Penang also has a heritage of natural (hill forests, waterfalls, coastlines, mangroves) and cultural landscapes, such as Penang Hill, Penang Botanic Gardens, Pulau Jerejak, Pulau Aman, Pulau Kendi, and the agricultural landscapes of Seberang Perai Utara as well as the orchards of Balik Pulau.

George Town and Melaka were listed on 7 July 2008 as Historic Port Cities in the Straits of Malacca, which “constitute a unique architectural and cultural townscape without parallel anywhere in East and Southeast Asia”. The total area of the George Town cultural property is 259.42 ha (109.37 ha core zone, 150.05 ha buffer zone) with a total of 4665 buildings (2344 in core zone, 2321 in buffer zone).

The following criteria contribute to their Outstanding Universal Value:

- a. exhibit an important interchange of human values, over a span of time or within a cultural area of the world, on developments in architecture or technology, monumental arts, town-planning or landscape design,
- b. bear a unique or at least exceptional testimony to a cultural tradition or to a civilization which is living or which has disappeared,
- c. be an outstanding example of a type of building or architectural or technological ensemble or landscape which illustrates (a) significant stage(s) in human history.

It is well known that Penang civil society, in particular the Penang Heritage Trust (founded in 1986), played a major role in advocating heritage protection including initiating and pushing for UNESCO recognition. Immediately after World Heritage listing in 2008, several issues became apparent such as inadequate consultation with local community and the need for traffic restriction. The approval of four high-rises in George Town, which contradicted the Nomination Dossier submitted for listing, resulted in a UNESCO reactive monitoring mission to resolve the issue in April 2009.

The state agency George Town World Heritage Incorporated was officially established in April 2010 to monitor and manage the World Heritage Site (WHS). A Technical Review Panel (TRP) was created under the Penang Island City Council (MBPP) to look into building submission and planning applications for conversions, change of use and infill developments within the WHS. In spite of this, various crises (high-rises, swift-breeding for birds’ nest-harvesting, illegal conversions, evictions) as well as many new infill buildings and haphazard renovations took place in the 8-year gap before the gazetting of the UNESCO-endorsed Special Area Plan.

The Penang State Heritage Enactment gazetted in 2011 nominally extended the scope of protection to the entire state. Meanwhile, the proliferation of swift-breeding prompted a World Heritage Committee request for a Heritage Impact Assessment resulting in this activity being prohibited in the WHS.

Responding to the proliferation of illegal hotels (about 100 identified in the WHS), the state government initiated a process of legalising them (called *pemutihan*, literally ‘whitening’), and at the same time imposed a moratorium on new hotels. Meanwhile, the residential population of the WHS, which had already been adversely affected by the Repeal of Rent Control in 2000, continued to decline from 10,159 pax and 2,533 households in 2009 to 9,425 pax and 2,302 households in 2013 (a decline of 7.2 percent and 9.1 percent respectively in just four years). It has likely fallen further since then.

Intangible heritage surveys on traditional trades and festivals undertaken by the Penang Heritage Trust on behalf of the George Town World Heritage Incorporated in 2012 and 2013 might provide a baseline for measuring the loss of intangible cultural heritage that has occurred with the evictions and loss of community in recent years.

Think City's George Town Grants Programme and George Town City Council's programme to encourage rehabilitation of derelict properties, together with investor interest (sometimes speculative) in George Town's heritage properties, have resulted in many derelict properties being revitalised and reused, but in most cases the quality of repair and adaptation was not assured. While the trend in hipster cafes is welcomed by the tourism industry, a pattern of high rentals and short-lived businesses has been observed.

Issues and Recommendations

1. Heritage protection awareness: Ten years after World Heritage Listing, heritage awareness is still lacking. In local government, achieving broader conservation objectives would require the integration of heritage objectives, the mainstreaming of the heritage approach, and alignment and coordination between departments such as planning, building, evaluation, engineering, licensing and enforcement.

2. Monitoring and enforcement: Monitoring and enforcement in the WHS is far from effective as illegal renovations are still taking place on a weekly, if not daily, basis. Among the most common destructive works are the hacking of plastered brick walls, the removal of structural walls, plastering with modern cement instead of lime, replacing wooden floors with concrete floors, the destruction and removal of heritage features such as timber doors, timber frames, shutters or windows, traditional roof structures and tiles, old floor tiles, etc. Illegal works may take place after office hours and during weekends, or behind closed doors, thereby avoiding detection.

The role of civil society and concerned people in monitoring and reporting should be recognized and welcomed by the local government and government agencies. Cooperation needs to be established among those with the common objectives of reducing destruction to heritage buildings and sites. Regular meetings with inclusive representation will help to improve the monitoring and reporting process.

3. Technical Review Panel: The appointment of the Technical Review Panel members tend to be made according to representation in the industry instead of according to the terms of reference spelt out in the nomination dossier.

An extensive assessment should be done of the infill projects and conversions approved by the Technical Review Panel since it was formed, to see if they have complied with the Special Area Plan since it was endorsed by UNESCO in 2011, and even more so after it was gazetted in 2016.

4. The Special Area Plan Interpretation: For new infill, the Special Area Plan gazetted in 2016 stipulates a maximum height of 18 metres up to the eaves but also stipulates that new development should follow the height of the lower neighbour. However, this guideline is often overlooked with negative consequences on streetscapes roofscapes, the overall urban fabric of George Town.

Envelop control should be strengthened according to the SAP. A process should be introduced to ensure that the consultant undertaking heritage impact assessment should be independent rather than one engaged by the developer.

5. Fire Regulations: Although the SAP stipulates that the wooden floors and staircases of heritage buildings should be preserved, the fire department requires concrete floors and staircases in planning applications for conversion to commercial premises where safety risk to general public safety is a factor.

A dialogue with the fire department is necessary to standardize guidelines pertaining to fire safety which are more sympathetic to heritage conservation, such as the option of using of fire-retardant paint.

6. Intangible Heritage: The living community of the WHS is the custodian of its intangible cultural heritage. Consequently, any further decline in the residential community should be stopped and reversed.

A policy is needed to stop further evictions and to attract more local people and Malaysians to live in the WHS. Schemes should be drawn up to repopulate George Town, for example, by encouraging shophouse owners to rent their houses, or even just the upper floor to residential tenants who will “live above the shop”.

7. Conversion to Hotels: Both legal and illegal conversions of hotels have changed the character of the WHS, streets and neighbourhoods. Some of the illegal hotels have no back lanes. ‘Party hostels’ induce after-midnight party behavior, disturbing residents on the street.

A moratorium should be imposed for new conversions to hotel use, while an assessment is taken on existing legal and illegal hotels, their impact on building fabric and neighbourhoods. The local government should also examine the rise of Airbnb with the intention of regulating the business and tapping on revenues.

8. Change to Commercial Use: Currently, it is attractive for landowners to let their premises for commercial rentals, whether legally or involving illegal conversions for food and beverage outlets and hotels.

The impacts of new commercial use should be mitigated, for example, the imposition of noise levels on entertainment outlets, pubs and “party hostels”, and the enforcement on the use of grease traps by food and beverage outlets.

9. WHS Infrastructure and Public Realm: Much of the interconnected historic road and drainage system, designed with historic building methods and building forms in a holistic manner, are regularly damaged in the course of utility infrastructure repairs, flood mitigation, and other types of ad hoc repair and upgrading projects on a regular basis. The changing of road and drainage levels is making the WHS more prone to rising damp and flood. There is lack of green open space and urban greenery in the WHS.

A Heritage Infrastructure Management (HIM) Plan is required to understand and protect this heritage infrastructure. At the same time, a public realm master plan needs to be drawn up to make sure that road-widening, new urban design projects and so forth respect the language of the historic streetscape and five-foot ways and their interconnectedness and legibility. The plan to turn the area around the Prangin Canal into a public park should be implemented with the restored canal as a water feature and archaeological showcase, with good pedestrian connectivity to the World Heritage Site.

10. Tour buses, traffic and parking: Although UNESCO strongly recommended that restrictions be imposed on traffic, little has been done since 2008 apart for the introduction of car-free Sundays on Beach Street, more pedestrian crossings and patchy cycle lanes. Among the problems are heavy traffic of single-occupancy cars and bottleneck junctions, the influx of large tour buses which park illegally leaving their engines on, and get stuck in narrow streets that they are prohibited to enter. Attempts to impose delivery times have not been successful.

A short, medium and long-term plan for traffic restriction should be instated to reduce polluting motorised traffic and encourage other forms of mobility.

11. Vistas and Buffers: The approval of several new developments particularly in the Seven Streets Precinct will mar the vistas from the WHS. The purchase of a large collection of historic shophouses by one or a few owners in the WHS buffer and Seven Streets Precinct and their conversion into commercial use entailed the large-scale eviction of tenants and gentrification.

Height limits should be imposed on the ‘tertiary zone’ area which constitutes the ‘broader setting’ of the WHS. Elevated public transport and elevated ramps or expressways should also not be permitted for the same reason. The government should consider expanding the core zone to the present buffer zone (slightly modified to include the early 19th century boundaries) and create a new ‘tertiary zone’ which can be converted into a buffer for the enlarged core zone.

12. Political Will: There is a lack of political will to extend heritage protection beyond the boundaries of the World Heritage Site, despite the existence of a rich tangible and intangible heritage outside the World Heritage Site. Many heritage buildings have been approved for demolition or illegally demolished, although it is within the local government’s powers to identify and to provide some preliminary protection for these properties and, in some cases, to make their preservation a condition of development approval. Although gazetted in 2011, the State Heritage Enactment has not been implemented in any significant way. The Governor’s Bungalow on Sepoy Lines, for example, is in a state of dereliction despite its outstanding significance.

The state government can start by inventorizing its own properties as well as lands under state and local government stewardship, and making the list public. It should also draw up a maintenance and repair schedule, pledging to keep these properties in good condition. An inventory of significant historic buildings, ensembles and sites, should be drawn up no matter where they might be located in the state, for preliminary protection and for consideration of restoration. The same applies for government lands, such as Penang Hill, Penang Botanic Gardens and Pulau Jerejak, as well as scenic coastlines, which should also be protected as cultural landscapes.