

Episode 2 - Sustainable Cities

This is Radio Australia. Hello, I am Barry Clarke and welcome to the second program in our series 'Sustainable Cities - Challenges for the Asia Pacific'.

In the first program, we looked at the phenomenal growth in cities, largely as a result of migration from rural areas, and some of the problems in managing urbanisation. In this program, the balance between development and preservation of our heritage; managing limited resources like water and, one of the most important issues for city planners, moving people around our cities.

PAUL BARTER: Economic success is leading to the potential for more and more private vehicles, more and more cars and more and more motorcycles. This is an enormous challenge for cities that are already quite large but they grew up in a context with very few private vehicles. And as a result, they are very dense cities, their population density is high, of the order of ten times higher in density than the typical Australian city. So it is just physically impossible for many cars to fit into dense cities like that.

CLARKE: Paul Barter is with the Public Policy Program at the National University of Singapore.

PAUL BARTER: And Singapore was amongst the first to recognise this problem very clearly. In a very hard-nosed way, the authorities here in the early 1970s saw their dilemma. Being a small island, of course, focussed their minds and they saw very, very clearly that they would not be able to allow a very high level of car ownership in Singapore. And so they took a firm decision to choose a different path, to choose a path of encouraging public transport and discouraging private transport, and they did that step by step. And this is something that they have in common with Hong Kong, which took a very similar decision. And for different reasons, Japanese cities and Korean cities also had very few cars in the early days of their economic booms. So, as Seoul and Tokyo grew and were very economically successful, that was in a context of very few cars and a very successful bus system in Seoul, and then later on, a subway system. Similarly, in Singapore, [in] the early days of the economic boom of the 1970s and 80s, Singapore was using all buses, and most people in Singapore were riding buses, even as they were becoming richer.

Now this is in great contrast, Singapore's story is in great contrast to places like say Kuala Lumpur or Bangkok or to some extent Taipei, where, in the early stages of their economic booms they were very quick to motorise, to have an increasing number of private vehicles, motorcycles and cars. And, so very quickly the buses lost a lot of their passengers, and even worse than that, the buses got clogged up in traffic jams, and so they became even less attractive. And so that particular path is a big problem for dense cities. Now in the late 1990s and early in this new millennium, both Bangkok and Kuala Lumpur and Taipei, they are all trying to play catch-up with places like Hong Kong and Singapore. And so they are now belatedly building a lot of public transport. But it is very difficult; once the horse has bolted, it is very hard to entice people back out of cars and off of motorcycles into public transport.

APRODICIO LAQUIAN: The lead pollution in Bangkok has been known to affect the IQ of children. It has also proven that a lot of the Bangkok policemen who usually wear masks, are also suffering from asthma and all of this. Now fortunately, in the past couple of years, Bangkok has been able to set up quite a good rapid transit system, and it has reduced the traffic somewhat, it has

reduced the pollution a little bit. The biggest problem in Bangkok is that they have not really been able to decentralise the city. You know, it is the biggest primate city in Asia, dominating the whole country.

CLARKE: Aprodicio Laquian is Emeritus Professor at the University of British Columbia in Vancouver.

APRODICIO LAQUIAN: Now I am not that pessimistic. I have known Bangkok since 1962, I got married there and so on, and it is improving and the Thai planners know exactly what has to be done. But what is really needed at this time is how to rationalise the transport system. A transport strategy should not really rely only on transport means, a transport strategy should mean the location of jobs and homes should be close enough together so that you could walk or take a bicycle between your home and your job place. And this is what I mean about the need for concentrated autonomous settlements around the city, so that you do not have to use your car or rely on rapid transit to do that. So, a transport strategy includes location, provision of all the services, but most important, just cutting down the travel time between activities, you know from home to jobs, from home to entertainment, home to shopping and so on. Unfortunately most of the urban models that we have are from North America where you have got what they call edge cities, and there is a great reliance on big mega malls based on transport and things like that. I do not think Asia can afford that kind of planning. We really need denser cities in Asia.

PAUL BARTER: One of the very interesting contrasts we can now see between places that did restrain private vehicles and places that did not, is what has happened to the urban fabric since then. What shape has the city taken since then? It turns out that transport has a very strong influence on the way the city can develop. Partly it is planning, but also the market forces work in this way as well, in that if you have a city dominated by cars, you have to spread out. Private developers will develop far-flung suburbs; they will put shopping centres off in these far-flung suburbs where the rich people in their cars can get to them. But in cities where most people are using public transport, even the middle class, places like Seoul or Japanese cities or Hong Kong or Singapore, if you are a developer of a shopping centre, you are going to put it where the people are, which is at a public transport interchange. And so in places like Tokyo, Seoul and here you find all of the major shops are very easy to get to by public transport.

In Bangkok and in Kuala Lumpur, increasingly, the huge shopping centres are very, very difficult to get to unless you have a car or a motorcycle. And so what happens to cities as they develop with a particular kind of transport system, in some way, they build in a reliance on that system. So, if you have lots of cars and motorcycles, gradually the buildings you build, build in a dependence on cars and motorcycles. If you have almost everybody riding trains and buses, over time, you build in to your urban fabric, to the places of the shopping centres, to the locations of the offices a dependence, the ability to serve that fabric with public transport. So we get this kind of path dependence situation going.

So, if I was asked what should Chinese cities or Indian cities, which are still at a very low level of private car ownership, what should they do? Should they go the Bangkok way or the Hong Kong and Singapore and Seoul way, I would definitely say start now, make sure you slow down the growth of private motor vehicles, and build up your public transport from the beginning, rather than letting it

deteriorate and try to build it up later. That is very difficult as Bangkok and KL, Kuala Lumpur, are finding.

CLARKE: In a later program in this series, we will hear in more detail how Singapore has developed a public transport system that is the envy of many cities in the region.

But in what other ways can we manage transport?

Paul Barter.

PAUL BARTER: A particularly exciting way of doing that is called bus rapid transit, and cities all over the region such as Kunming in China, Taipei, Nagoya in Japan, are following the lead of cities in Latin America, such as Curitiba and Bogotá in establishing bus rapid transit, which is like trying to mimic all of the good things about mass rapid transit but with buses on the roads. And it turns out that this pays dividends and it is an increasing trend.

CLARKE: This is Sustainable Cities on Radio Australia, our series exploring some of the challenges in developing more liveable cities.

A city's identity is often formed by a blend of old and new.

VICTORIA HERRERA: In the perspective of architectural history, for example, built heritage is a way to see parts of our history. Even if we are a modernising community, having that sense of the past is still very important. So, I think preservation and conservation should be part of any planning, both in terms of city development and cultural development in the bigger context.

CLARKE: Victoria Herrera is Assistant Professor at the University of the Philippines.

VICTORIA HERRERA: Well, basically it is a question of economics, especially with the rising cost of real estate, especially the older parts of the city. And so, developers or owners tend to look at it on financial point of view rather than on its historical and cultural perspective. So, tearing down an old building would be economically viable, rather than preserving an old structure. So, that is one issue. Another of course is the lack of political will, even if it is possible I would say I have seen it in different cities. Like if I can refer to Singapore, they have been able to conserve what was left of the old Chinese district. They were able to do that because there was that political will to be able to make it possible for the owners to restore the shop houses the right way. There was also that support system, like incentives to work on these old shop houses. So, I think that it is one thing that is still lacking in Manila in the Philippines, but I know in the private sector there is that consciousness that is already there.

CLARKE: Victoria Herrera points to the recent demolition of a landmark building in the Art Deco style in Manila's University Belt area.

VICTORIA HERRERA: The building was important to different sectors of the community because of the different activities that it generated, from the sport, to meeting in restaurants, to betting.

CLARKE: The building's primary purpose was for the sport of Jai Alai.

VICTORIA HERRERA: The sport Jai Alai was of Basque origin, from the Basque region. It is a game very much like handball. I think the popularity also for Jai Alai the sport and the building itself is because many people bet on it, even outside of the game room. And in the pre-war until the post-war years, the Jai Alai building, apart from the sport, it was also known for its restaurant; a very

high-end restaurant. They called it the Sky Room, where the elite from Manila would go. So, it was one of the landmarks of the nightlife of old Manila in the pre-war up to post-war years.

CLARKE: It is not just architectural style or merit alone that means a building should be preserved for future generations. As the Jai Alai building had different uses, its appeal was broad across Manila society. And although they were unsuccessful in preventing its demolition, Victoria Herrera believes it served a real purpose.

VICTORIA HERRERA: They were successful in raising the consciousness among the community as well as from the city government that it is not that simple. What has happened was that in many ways the city mayor became more conscious of his future decisions. Now he is embarking on the restoration of another building that belongs to the same period, the Metropolitan Theatre.

SUKHUMBHAND PARIBATRA: As in other big cities, the new and old must go side by side, must co-exist.

CLARKE: Sukhumbhand Paribatra is Chairman of the Chumbhot-Pantip Foundation in Bangkok, which runs Suan Pakkad palace. Now a museum, the palace is a cluster of traditional Thai wooden houses and contains a fabulous collection of Asian antiquities. It was left to the nation by its owners. The complex, in inner Bangkok, is set in beautiful gardens and stands in stark contrast to the high-rise buildings surrounding it.

SUKHUMBHAND PARIBATRA: The challenge is only how to conserve the old because the new will continue to be built. I have talked about this with a lot of friends, and one day perhaps we can see the establishment of something like that had been established in England for a long time, the national heritage homes. You get a central fund to buy conserved houses and preserve them for eternity. I would love to see all the old buildings preserved, but I know that this cannot be done because it puts great financial burden on the owners. They want to do things with their own property.

So, not everybody is as lucky as we are here, that the former owners of this palace decided to build this palace and to preserve it and bequeath to the foundation sufficient resources to maintain it. And other people are not so lucky. Somehow, the financial burden of owners of traditional homes must be shared in some way. You cannot tell everyone to keep their old homes, you cannot.

CLARKE: While there is not a lot of traditional Thai architecture, apart from the temples and palaces in the city of Bangkok, Sukhumbhand Paribatra acknowledges the difficulty in blending tradition with modernity.

SUKHUMBHAND PARIBATRA: Thai architecture is not appropriate for most people living in a modern world because Thai houses take up space, they are difficult to air-condition, they use wood, which is really expensive right now. So it is not suited for modern life in Thailand. People, of course, try to preserve the soul of Thai architecture in a number of ways, not only through conservation but also through inventing new styles of architecture, which encapsulates traditional Thai architectural personality. I do not know how much success one could say has been achieved, it is very difficult to reconcile the two styles. But I do not think it is that big a problem.

CLARKE: From urban conservation to water conservation.

PETER CULLEN: Well, I think it is really interesting, Australians know they live in a dry country, but we have really been remarkably profligate with our use of water, not only in our irrigation communities, but in our cities.

CLARKE: Peter Cullen is Emeritus Professor of Ecology at the University of Canberra.

PETER CULLEN: We seem to have a frontier approach to water, that we take it and we use it once and then we discard it. Those attitudes are very deeply embedded. The cities used to believe they had plenty of water, but the population growth we are now experiencing means that cities like Melbourne and Sydney are looking at an extra million people over the next 20 to 30 years, and those people do not bring more rain with them. So, that means that the available water is being shared around amongst a lot more people. So the growth we are getting and the dry spell we have been having is really putting a squeeze on the water in our cities.

CLARKE: Peter Cullen is also a member of the Wentworth Group, a group of Australia's leading environmental scientists who are advocating radical and fundamental reform to halt further degradation of Australia's landscapes.

Over the past decade or so, much of Australia has suffered quite severe drought conditions. And while that has raised community awareness about the need to use water more wisely, we often revert to old habits when the drought is over. So what should we do in the short term to better manage this precious resource?

PETER CULLEN: Nationally we are moving to establish a water market so that irrigators are given a much clearer property right to the water they have, and they also have the ability to sell it on the market. And we believe that that means that water will be able to move from relatively low value crops, such as irrigating pasture, to higher value crops or in fact cities. And we have got an example now in the city of Adelaide, where the city is buying water from dairy farms so that it increases the available water for the city. So, if we can get a market going, then cities might buy from rural people and water in the rural areas will move from lower value crops to higher value crops. So that is the primary underpinning of the water reforms that are going on in Australia at the moment.

CLARKE: And what about long-term strategies?

PETER CULLEN: The long-term strategies are we are going to have to develop much smarter approaches to recycling. When you look at the water use in cities like Melbourne, about 50 per cent of it is used outdoors on gardens, swimming pools and so on, and probably another 15 or 20 per cent is used to flush toilets. Now there is absolutely no reason why you need to have top quality drinking water for those sorts of purposes. So, we are exploring in a number of cities the idea of having what we call a third pipe system where we have a pipe that brings in drinking water, a pipe that brings in recycled water for those other purposes, and a pipe that takes out sewerage and waste. And we have a number of subdivisions where this is now being explored. It is becoming a bit cheaper to do it, and we have some very good icon sites for that.

We have an outstanding example at the Homebush Bay Olympic site where water comes from the roofs of the stadiums and comes from storm water off the general area, it goes into a holding area, it is mixed with recycled water that is treated well from the sewerage. And that water is used to irrigate parks and gardens in that Homebush site, it is used for the water features and the fountains and things like that. So, it is an example where the community has been getting used to using recycled water and finding it can be used for a lot of the purposes that we need water in a city.

CLARKE: Peter Cullen, and in a later program in the series, we will hear of some initiatives by one Australian city council in their efforts to limit water usage.

But what can we learn from our neighbours in the region?

PETER CULLEN: I think Singapore is a real lesson for us in Australia. They have adjusted to the idea that water is scarce and an important commodity, and they have started to educate their community to get used to the idea of recycling. And they are treating water, effluent, and putting it back into the water supply. And the new water in Singapore is talked about a lot in Australia, and is one of the things that I think Australians will move towards to over the next 10 to 20 years.

CLARKE: But water is not just a precious commodity in Australia – it is a vital resource for everyone. Allen Williams from the Asian Development Bank.

ALLEN WILLIAMS: Many places are certainly suffering from lack of water, and, in fact, what has happened [is] the population has grown faster than the rate at which the infrastructure can be provided. So we find that there are many areas within cities that either are not served at all or have very inadequate services. Other areas have old and dilapidated facilities that were provided many, many decades ago and have not been expanded or developed since. So this really is one of the major challenges.

The other side of that, of course, [is] if water is provided, then vast amounts of waste water are also generated, which also have to be dealt with. And again, in many cities, there are very inadequate facilities for dealing with the disposal and treatment of waste water. And it is not just domestic waste water, because in cities there is also the problem of industrial waste, which can also cause a lot of problems. And this is why we are seeing a lot of pollution in the rivers and the coastal waters, because the waste water is often discharged directly without any form of treatment, and this leads to very severe environmental degradation.

CLARKE: While the challenges in building more sustainable and liveable cities are immense, overall Professor Laquian remains optimistic.

APRODICIO LAQUIAN: In fact, when I started my whole career about 40 years ago in this field of urbanisation, the trend was a very pessimistic view of urbanisation. I participated in conferences all over the world about the exploding cities, that metropolis will become necropolis etc. Happily, around the 1980s, 1990s there was a changed view of urban areas, that these cities are really the greatest contributors to per capita income, they are the engines of economic growth etc. So, I have gone along with that kind of positive view of cities.

The whole issue now is how sustainable are mega cities? Will they be able to produce enough for people to live comfortably, and will they be able to get rid of their waste and all their pollution and so on? And some of my colleagues in the urban planning field are still quite pessimistic. They say if the average person in Melbourne will continue to use 400 litres of water per day, and if we continue to consume at the rate that we are consuming now, we will need two additional earths immediately, right now. So, these are not sustainable, the cities at present consumption patterns. Now you can get scared with that kind of prediction or you can try to do something about it.

What I am trying to do is to find ways and means, positive lessons learned etc., that will enable us to have more liveable cities. Now I am not sure that we will achieve that, but I think with the different means that we have, urban nodes, better transit, dealing with waste and dealing with water and

sewerage etc., we might be able to buy time. Maybe we can survive another 100 years, but we this time available to us, maybe we will develop the technology and the lifestyles and all of these things that will enable us as a human species to continue to be residents of cities. So, I cannot really see the gloom and doom of environmentalists. There are in my studies of these 14 mega cities in Asia, certain terrific lessons that you can use, and if we just share this and tell them look, this is what happened in Bangkok, this is what happened in Singapore, and maybe with adaptation, you can improve your own ways of dealing with this, then yes, we will survive. We will be able to have sustainable cities.

CLARKE: In future programs in the series, we visit two mega cities, Bangkok and Beijing, and two medium sized cities, Singapore and Melbourne, for a snapshot look at how each of them is dealing with urban challenges.

TALENT: Everything is in a way very compactly planned. So for example we have Singapore River, we have the civic district, we have the downtown, we have Orchard Road, we have the Bras Basah and Bugis area, not to mention the historic areas in the city such as Chinatown, Little India and Kampong Glam. We are a small island but I think it really packs a big punch.

CLARKE: Singapore, next in Sustainable Cities.

This series is produced by Sue Slamen and Barry Clarke, from Radio Australia.

