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ARCHITECTURAL COMMITMENT TO ENVIRONMENT BALANCE
BY THE YEAR 2020

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1.0 INTRODUCTION

My paper intend to look at the role architects can play and to pose some questions on the direction towards achieving Vision 2020. Architects have only a very small supportive role to play in any development. Therefore, if I were to assume a ***too important a role*** for the architectural profession, I would only be misleading my fellow professionals and myself. We know that the built environment today is dictated and controlled by the powers within the various strata of the Government. Planning decisions and policies although well-meaning and well-intended for the overall benefit of the nation are laced, often, with self-perpetuating motivations. Architectural ideas, designs and concepts are often manipulated and misinterpreted by wealthy land developers and owners, who having seen some 'out-of context' examples overseas pride themselves at knowing what is best for Malaysian, insist that architects must follow their directives and adopt those designs for Malaysianization. Malaysians being Asian are not inclined to be non-accommodating, therefore gently or meekly obliged. It is also knowing ***which side of your bread is buttered.***

There are other consultants because of the seniority over their architectural counterparts in Government services, use their position and clout to push for more control and administrative advantage, to make inroads into the architectural profession. Be that as it may, if having acquired a larger share of the development 'pie' they would also assume complementary responsibility for the poor quality of built environment, the devastation of the natural features of God's gift' to us, etc; but this is not so. The Architects are known to have been blamed for all environment ills e.g. road system poorly laid out to create congestion, wrong placement of facilities e.g. oxidation pond next to children's playground or open space reserve for recreation etc. This does not appear to be fair. This prevailing attitude must change.

The concept of a balanced Environment for 2020 must be based on co-operation of everyone. Each accepting his role and playing it altruistically and sincerely. That which is beyond your scope ought to be left to the others. Architectural training is one meant for a universal macro overview of what constitute

quality environment for
quality living, leading to a
quality of life, which is

not an imposition on nature and the natural environment, but one in harmony and in complementary manner creates a balance where on the one hand there is Development and balanced on the other with Conservation.

2.0 HISTORICALLY EXISTING

2.01 Natures' Gift

As Malaysian, we are very lucky both environmentally and economically. Traditionally, our wealth had come from sources, which almost has a 'fairy-tale' ring to it. We dig our ground to bet wealth in the form of tin, oil etc. Not only that, our money also 'grow on trees', rubber, palm oil, timber etc. For food, we harvest our rivers and seas.

Just as the prices of tin and rubber dropped and our economy threatened, we discovered high priced prime quality petroleum. He who is above is always smiling on Malaysians.

However, can Malaysians say that we are looking after all our natural resources? Is that why our environment is taken for granted? Are Malaysians generally getting too greedy and less concerned about our natural heritage and environment? What will we be leaving behind for our future generations?

These are difficult questions to answer, but we may and can:-

- a) plot and chart the path ;
- b) layout some basic ground rules;
- c) restrict and define terms and references etc.;

for the development of Malaysia so that some form of what we now have will be maintained, retained, preserved and handed down to our children.

Architects and other professionals associated with development of new habitat and housing must be: -

- aware of;
- conscious of and
- sensitive to

the natural environment.

2.02 Architects' Responsibility

When planning and designing development projects, one places oneself in the same category as the "Creator", but of a more finite scale. It is a great responsibility. What we create will, ultimately, affect the inhabitants who will live there. It affects; -

- a) their quality of life;
- b) whether environmentally it inspires them to great spiritual heights or it drags them into 'ghetto-like' environment existence which saps their soul;
- c) their comfort and convenience – are there 'flash-floods' during heavy rainfall?;
- d) visually is the scheme totally denuded of trees and vegetation that it is almost like a desert?

These are fundamental issues that all responsible professionals both in the public and private sectors must address and focus on.

2.03 The Human Element

All developments are for human consumption. It, therefore, follows that the most important consideration and ingredient in any development must be how the 'human element' is looked after.

Regrettably, the 'human' factor is too often forgotten by the developers, local authorities and consultants – they have become too engrossed with the bottom line – the profit margin.

Man, himself takes a 'back-seat' in the name of Progress & Development. P&D is a great thing. All third world countries aspire for it. Wrongly applied it becomes a burden.

Too many projects on town planning, housing schemes, urban, rehousing or squatter rehousing, agriculture resettlement etc; had all emphasized the wrong values of P&D. We have gone for quantity and not quality, resulting in the degeneration of the quality of both the built and the natural environment and, the quality of life. The rich natural heritage of Malaysia with its vast tropical jungle, river network, flora, fauna and natural formation makes it one of the most envied and interesting of all the developing nations of the South.

Conservation may be in the minds of some Malaysians, but it is a burning subject that needs to be addressed. Under the administration of the former Colonial powers and early settlers, towns and urban areas settled, lacked distinctive character, they do not create a sense of permanence or belonging to the inhabitants. An environment for gracious, graceful and quality living amongst the people was never considered or planned. This attitude must change and is changing with Malaysia pushing towards 2020.

3.0 SURGING FORWARD

3.01 The Spirit of Architecture & Environment

As we approach 2020, our architecture and urban environment which is reflective of the 'spirit' of Malaysia must be created out of our cultural needs. Architects must be in the forefront. Architects must be the 'force of Resistance' against the 'fast-buck' or 'hit and run' developments. In this respect the Government must play an important and constructive role. The recent stand by the Ministry of Housing over 'no trees, no C.F.' is probably one of the greatest landmark decision in the housing industry. The building industry need Government support and directive concerning quality of environment and life. Once a political decision is made by the Government; there is political will to follow it through. Therefore, for us to achieve an environmentally balanced 2020, a co-ordinated and committed support from the Government is required, both for a well-designed and well-built environment and the sustainability of the natural environments.

Prevailing attitudes must change. Man-made structures must complement the natural environment and co-jointly inspire and create a sense of belonging to its occupiers. In this context, the Architects of Malaysia have a heavy burden and responsibility towards our 'charge'.

The cultural spirit and texture of the Malaysian surroundings must be captured in the creativity of the local architecture, translating the local spirit into spaces and structure within the works expressed. There should be more concern and serious attempts at understanding and appreciating the deeper meaning of Malaysian architecture. A consistency of thought and work needs to be encouraged.

3.02 Educating the Public

Architects together with PAM must: -

- Educate the public;
- Demonstrate to the public by what we build and design;
- Setting good examples of quality of life, environment etc;
- Support our national aspiration for quality.

In support of: -

what we are:

The Architect must lead the building industry towards environmental quality for our Malaysians, to ensure the future is protected for our children and their children; and that Malaysian which embraces so many diversified groups will become a basis for a wealthy and enriched nation.

what we have:

The Architect must lead to enlighten other professional groups, the people in authority and the public on the wealth of our natural environment, our rich cultural heritage within our built environment, our natural resources and the need to preserve them for our future.

What we are capable of;

The Architect must in themselves strive for internal pride and confidence. He needs to package and market his skills to the end-user that a **“Made in Malaysia” product must be better for use in Malaysia** than an imported product which has not taken cultural environmental, climatic and local skills into considerations. Therefore, Architects must produce quality work to justify the confidence placed in them. The public and government must also provide the support the Architect deserves. After all the “Made in Malaysia” Proton cars would not have been a success storey if our Government had not supported it.

What is rightly ours to protect:

Our civilization is but only a very fragile veneer that can be easily erased or scratched off. Architecture is not simply a question of building four walls and a roof over your head. It goes deeper than that. It involves:

Preserving culture;
Knowing history;
Understanding climate;

Choice of building materials;
Appreciate our environment; and
Valuing the human-element.

These are the values that architects must protect for the Malaysian way of life.

What we should not squander away in carelessness:

In too many developments the first thing done is to layout the plan in a 'grid-fashion' and then the consultants will 'platform' the slopes. On site the trees are felled; the top-soil is bulldozed and in together with the poor quality earth, removed; the slopes cut and valleys filled in; natural water-course diverted; etc; these are part of our natural heritage, our environment, our source of life, being destroyed. P&D must go on, but in the process harmony must be maintained and Architects must be in the forefront to crusade the cause of ethical design for Malaysians.

Malaysia needs P&D, but P&D must be done at a price, which do not mean destroying our environment whereby the quality of life deteriorates. If that if the price Malaysians must pay for P&D, something is wrong. As Architects, we must create built environment and treasure what nature has provided. Architects, after all, create built environment for humans; and the keywords are 'human' and 'environment'. Without both there can be no architecture.

3.03 Architecture Towards 2020

For Architects to be committed to Environment balance towards year 2020, we must observe the following; that as a body of architects under the umbrella of PAM, we must, with dignity and self-respect, observe and adhere to the following in order that we may survive to serve: -

- a) we do not allow ourselves to be 'intimidated' by professionals, authorities and clients, but to maintain our courage and conviction of what is right and best for Malaysians and Malaysia in 2020;
- b) we are not afraid to commit ourselves or make a stand on any issues in case it was a mistake. In every issue there must be a 'win-lose' situation. We hope to 'win' all the time but if we have to lose sometimes – so be it. To err is human;
- c) do not be afraid to take 'chances', if the situation calls for it. If we win, the whole nation wins. It is the case of 'no venture, no gain' and 2020 is a venture;
- d) do not give in without giving the issue a good fight. Architects have been 'gentlemen' for far too long. We must make a stand, to say 'enough is enough', we must now create an environment suitable for Malaysians in 2020;
- e) do not give into aging. With aging one becomes senile. Samuel Ullman's essay 'Youth' has been adopted wholesale by the Japanese businessmen's life philosophy. This single-minded

approach of the philosophy has taken them to where they are now. Allow me to quote a little from this fine essay:

*“Youth is not a time of life:
it is state of mind...”*

We grow old by deserting our ideals....

*In the center of your heart and my heart,
there is a wireless station ...
it receives messages of ...
courage and power...*

*When the aerials are down and
your spirit is covered with snows of cynicism
and the ice of pessimism,
then you are growing old...
your aerials are up
there is hope you may die young at 80.”*

4.0 PROBLEMS NEEDED TO BE CONSIDERED, EVALUATED AND RESOLVED FOR 2020

4.01 Population Growth

Malaysia's current population is 18 million with 43% living in urban areas and only 30% living in the rural areas by 2020. The projected population then will be around 38 million. This means that 70% or 26.6 million will live in urban areas and 11.4 million in rural areas. The imposition on all infrastructural facilities will be mammoth. Supply of water, electricity, telecommunications, sanitary, transportation, communication, education, housing, health care, etc; must be coordinated with precision and determination. The fragile interdependency of these facilities is such, which an unbalanced juggling will result in a total collapse of the system.

2020 is a mere 30 years time-span from now. Unless all development and infrastructure are coordinated statistically and strategically planned, we may follow similar path already experienced by other neighbouring countries. If the urban growth of the Malaysian cities and environment between 1970s and 1990s is used as an example of coordinated and preplanned growth, the next 30 years will mean chaos.

4.02 Infrastructure

With population growth and industrial demand escalating, essential support services must be planned and coordinated to meet these demands whilst ensuring control and preservation of the environment. This aspect of planning although understood, discussed, adopted as policies, and had somehow failed in many development projects of the 1980s. This must not be repeated. Therefore, implementation and

policy makers must maintain a hands-on control to coordinate all projects in the country.

4.03 Manufacturing & Industrialization

Whilst many building projects are being manufactured locally, there is not sufficient research & development into industries which involves heavy engineering, electrical or electronic. Industries must be encouraged to expand into other areas of specialized production. A Central Government sponsored institute for research and dissemination of information would hasten industrialization. New technique of construction should be explored, study on more innovative usage of timber must be done, expanding the scope and market to consume 'downstream' timber product, must be considered etc.

Local workers are intelligent and skillful when exposed to new techniques of methodology of construction, many only learn and acquire these skill whilst on-site. Government supported and sponsored institute for the advancement of tradesman and expertise training must be encouraged to ensure properly controlled growth.

4.04 Agriculture

Agriculture as an important primary industry being 19% of the national economy in the 1990s is expected to decline to an alarming of 5% by 2020. This continuing decline must be arrested by the Government and must not be allowed to perish. Whilst pursuing 'new' technology, Malaysians must not forget this important consumable sector i.e. the primary industry. The recent disintegration of the mighty super-power, USSR, whose technology matched that of the USA, found themselves in a situation where they could not feed their population in the urban areas.

Basic primary products essential for normal daily sustenance must not be overlooked; and given into complete reliance upon neighbouring countries for support and supply. Development of a proper sustainable primary industry can contribute and provide a balance for the otherwise 'over-loaded' environment.

4.05 Transportation

This area needs urgent addressing, much up grading and reducing is Required. The planned North-South highway is already obsolete before completion. More network of roads and highways are needed, not only in Semanajung but in Sabah & Sarawak as well. With the population growth expected, there is bound to be more internal and cross boundary migration from West to East Malaysia. Therefore, to meet with this growth road network must be planned and projected ahead of time. Sea ports and airports are currently under-designed. There are too few to serve too many. Due to heavy loading and usage, existing medium load facilities gets worn out much faster.

4.06 Housing

The constant thorn-in-the-side of the Government. For a central national achievement in housing, the Government must centralize all

housing activities. Current splintered and fragmented agencies at both the Federal & State levels often lead to contradictions and confusion.

Much of the government low-cost housing is being borne by the housing developers. This cost is ultimately passed on to and being borne by the house purchasers. That being the case, funding could be more efficiently distributed for proper project implementation if there were a central agency, well coordinated, controlled and predetermined on its objective.

Current shortfall in providing housing for the masses on a population count of 18 million will escalate into total chaos and failure when the population becomes 38 million. With 30% of the people living in rural areas in 2020, with the standard of living not much different from current middle income living, it will mean much more imposition and improvement over current services and facilities provided.

4.07 Quality of Environment

Since the economic growth of the 70s, the Malaysian environment had declined. The bacteria counts in our waters have gone up. Freshwater rivers have more chemicals discarded into them, rendering their habitability questionable. The carbon monoxide and carbon dioxide levels in the air have gone up, due to more greenery giving way to 'concrete-jungle type' housing and condominium sprawl; the air in our cities is now questionable.

Highways and roads intended for rapid commuting between places are now jammed with traffic and in a constant stage of traffic snarl, be it peak hours or off-peak hours. Travelling time between KL and Subang airport in 1974 was 25 minutes, with the new highway, travelling time in 1992 is anything between 45 minutes to 1½ hours.

Pocket developments along the side of major highways must be properly coordinated and figure computed to ascertain loading on major highways. The flow of traffic must improve. All cities, be it Ipoh, Johor Baru, Penang or Kota Kinabalu are now experiencing constant traffic hold-ups. This will not do for 2020.

4.08 Natural Resources

As earlier mentioned he who is above is always smiling on Malaysians. However, the rate we are depleting our resources without considering replacement or continued sustainability, will result in us not having anything left by 2020. The current anti-tropical hardwood campaign is just a tip of the iceberg. Once, Malaysia, a nation of the South begins to show that we are competent, capable in certain field or economically successful, such reaction from the traditionally developed countries will become the norm. This campaign is but out of envy. Therefore, what we have in other natural resources need to be protected and utilized wisely, to be commercially marketed for maximum revenue income.

4.09 Government Participation & Control for Implementation

The above are highlights of the current situation. Whether we take stock and re-evaluate ourselves before proceeding onto a new course, only the policy makers can decide. The private sector is all available

when called upon to do so. As mentioned earlier what can we expect to leave behind for our future generations will depend on the following: -

a) Plot & chart a path towards 2020

We cannot predict what the future will hold. Economic growth is always followed by economic recession. Well-managed and prudent expenditure will and can soften the blow of economic downturn.

Developments must be controlled. Government spending dovetailed into that of the private-sector. When one sector is spending; the other needs to restrain, this will not 'overheat' the economy or result in unnecessary demands on labour, manufacturing industries, services, etc;

b) Laying Basic Ground Rules and Guidelines

Ground rules on how to approach and coordinate and interweave Government 'vision' with the aspirations of the private sector is important. It must be orchestral and coordinated. Preplanning at topmost, intermediate and primary levels are essential to ensure continuity of policies; understanding of problems and difficulties; and common intentions towards achieving a common goal.

Guidelines once established must not be altered or changed or waived at the whim and fancy of persons in power. Guidelines must interphase with all aspects of developments for carrying Malaysian to year 2020.

c) Restrict and Define Terms and References

Current rules and regulations leave too many areas vague and unclear to be addressed. Resulting in developments, which are subject to the interpretations of individual officers at grass-root level. Standards and acceptable norms must be clearly established and set out, leaving no room for mediocrity.

d) Coordination and Cooperation

This must be carried out at government level and also at private sector level. Coordination and cooperation require humility on the part of all involved. Inter-departmental jealousies and wielding of power must not be permitted to permeate to the surface. An attitude of professionalism towards one's charge and task must be inculcated to implementers.

Coordination and Predetermination in any project is always a difficult think to do as it involves much more analytical work and detail study during preliminary stage of the projects. Much time is spent; once committed the project must proceed. It is the prevailing frivolous attitude among developers and government client-body representatives, who insist in futile exercises among consultants to design, study and evaluate projects which will never 'take-off' that resulted in many projects being poorly conceived.

- e) Localized Developments
As in Town planning, land uses are worked out on suitability, accessibility and other related factors, the planning for national growth on a geographic basis must be along similar principles. Current Malaysian practice is wasteful and defies logic. Surely not all states in the country can be successful as Free Trade Zones; nor having good tourist resorts with proper back-up service; nor all have International airports access; nor a commercial deep harbour for maritime trade etc. Physical and economical planners must look at the physical constraints, environment implications and suitability of any of the facilities proposed for the location in question. Some states are more suitable for Industries; others are better suited for agriculture, tourism, forestry, resorts, etc. Centralizing spending in one locale is better than spreading funding thinly all over the country.
- f) Research and Development and Incentives
Malaysia must encourage more R&D programmes. Government Institutes of research and higher learning must be adequately funded for such purpose. Some aspects of the research could be privatised to secure additional revenue to support other non-privatised sections. Manufacturing associated with the building industry ought to be asked to render assistance towards new conventions and product research to facilitate better quality and cost-efficient manufacturing technique. Incentives in the form of tax rebate will encourage research and development in the building industry and architectural profession. They will be more prepared to meet the demands of 2020. There can never be over R&D.
- g) Exporting Expertise
With progress and R&D, the inevitable resultant spillover will be the export of expertise to other developing countries. Developing countries have a closer affinity towards receiving technical know-how from other developing countries especially within the regional context. By 2020, Malaysian professions in the building industry will be most prepared and geared towards exporting our skill.

5.0 CONCLUSION

This paper has endeavoured to cover the existing situation. Malaysia's aspiration, associated problems with the approaching 2020 and what we need to do to overcome any eventual shortcomings by 2020. Being human we are bound to make some mistakes. But an 80-85% gain on projected developments would be a tremendous achievement. However, in our pursuit to become developed, we must not lose sight of what it means to be a Malaysian, to preserve our Malaysian value of

life, to maintain our cultural and traditional infusion of a multiracial nation, sustain and protect our natural environment etc.

Our over zealousness in pursuit of high technology at the expense of all else may result in an unintentional but self-imposed economy re-colonisation by economically and technologically more superior countries.

Technological dependency on another nation creates a new kind of Imperialism that is much harder to off-shackle. Therefore, Malaysia must, at all cost, embark on a Malaysian form of 'Industrialization', which will not be interdependent on too many cross boundary situations whereby we can be held to blackmail or economic ransom.

Whilst emphasising on Industrialization, we must not forget the necessity to continue producing life-sustaining consumables. Basic sustenance e.g. rice, vegetables, poultry etc; industries must be encouraged to be maintained and/or expanded to meet with growing demands. There are too many recent examples on a global basis to show how interdependency had failed, to serve as a good lesson for us to learn from.

As Architects, although we may be, in essence, dealing with buildings, our role is so intertwined and tied up with all surrounding issues that in the final analysis, we become affected by it. Therefore, to solve the issue of architecture, the built environment and to create a situation, where the quality of life for Malaysians in 2020 will be that of a developed nation, the commitment cannot come only from within the architectural profession. It must come from everyone involved in the planning now for 2020. Therefore, for us to be a developed nation by 2020, let Malaysians of 1990s view the planning for 2020 with the three D's: -

To develop Malaysia with
A direction and with
A determination to achieve the

Task set out. By 2020, the three D's should be synonymous with our success. Unless well-planned, properly coordinated, proper predetermined, worked with diligence and a sense of responsibility, a forth 'D' may creep in, to herald 'demise' by the year 2020.