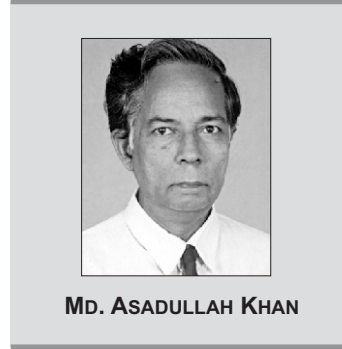


Dhaka: A choking city cries for relief



Md. ASADULLAH KHAN

OVER the last two decades the country has experienced a phenomenal urban growth. And with rapid growth compounded by high concentration of population, the capital city has now become an epitome of squalor, poverty and environmental abyss. Despite the everyday trauma, exhaustion and rigours, people are endlessly attracted to the city, for it seems to have work, livelihood and even prosperity on offer. But during the last one decade, the pace of urbanisation in Dhaka has resulted more in proliferation of population, poverty and pollution. At the same time quality of housing, health and hygiene has gone down.

The conscious citizenry have time and again voiced their concern over the way urbanisation was taking place and the wheels of development have defied reason and rational consideration. In absence of clear-cut policies, they complained, shopping plaza, hospitals, clinics, English medium schools, coaching centres and private universities have mushroomed in the residential areas in total disregard of a healthy living. Ominously still, unscrupulous and greedy people believably with political backing have encroached on the river Buriganga and Baridhara-Gulshan, Banani and Uttara lakes as well as Ashulia and Uttara Khan haor areas to perpetuate their business interest. Shockingly, every inch of

available space, either over land or water is being gobbled up for housing, legally or illegally.

On the other hand, after 35 years of independence, the country's rural areas look as bad as it could be. More than 70 per cent of the people live on almost a pittance, more than half of them are completely illiterate, have no access to sanitation and health care or even clean water. Things are so bad in the countryside that hundreds of thousands of people of all categories pour into the metropolitan cities especially Dhaka everyday because life on the pavements of the city seems somewhat better to them than in those villages that we once admired so much. Dhaka is now a human sea that moves in massive surges. With population now ballooning to almost 13 million, the city is suffering a serious growing pain. Even the footpaths recently constructed in the posh areas are in the possession of hawkers with little space for people to walk.

To meet the mounting pressure of population, the city's skyline now thrusts aggressively upwards seemingly in a bid to pull down the clouds. The city now stretching from Dhanmondi to Banani to Gulshan to Baridhara to Uttara embodies the idea of innovation and achievement in a dazzling range of human endeavours. People of all categories from around the country are streaming into Dhaka, as if it is the only city of activity and business, to test themselves against the toughest competition and to reinvent lives that seem to be so hard, stale and unrewarding in any other setting.

Dhaka is fast becoming a city of the future apparently through building of skyscrapers all around its limits. But as population has swelled in the city, so there has been a surge of violence and crimes. Shockingly, this city now magnifies a myriad of social ills because of administrative inaction and lax enforcement of laws.

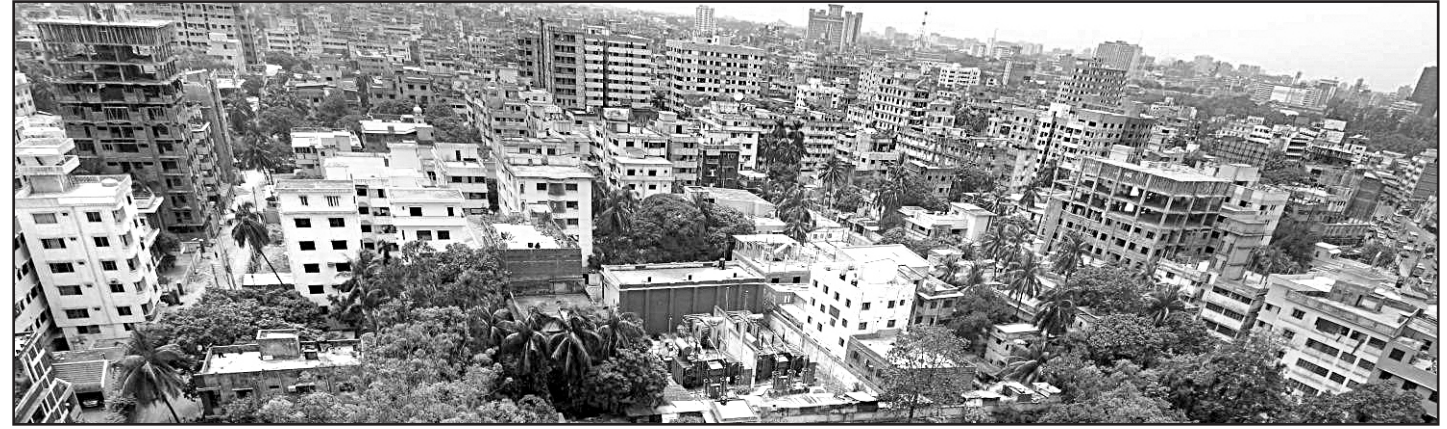
Conscious citizenry would in no time find Dhaka as one of the ugly human settlements on earth: a city that defies conventional notions of urban planning, human behaviour, rationality and environmental awareness. It is becoming an urban jungle where even new waves of architecture and lifestyle -- not always pleasing to be sure -- are grotesquely on display today. With a huge population it is one of the most crowded cities in the world with facilities rapidly becoming inadequate with every passing day.

In the game of making money mostly at the expense of people's suffering, city planners and utility agencies concerned have forgotten the older part of the city namely Sadarghat, Gandaria, Wari, Nawabpur, Chawkbazar and Hatkhola etc. Paradoxically, other cities like Tokyo, Hong Kong, Kuala Lumpur, Bangkok and Singapore in the Asian region with such growing populations are dazzlingly alive. To outsiders, Dhaka, is an urban nightmare with skyscrapers thrown helter-skelter against a backdrop of exhaust fumes, snarled traffic in a tangle of winding streets and towering residential and commercial blocks mixed together.

During the past years, Dhaka has disappeared beneath a vast terrifyingly crowded urban settle-

ments which seem to rise out of a sea of uncollected garbage, choked drains, and potholed roads. Because of the awakening created in the masses garbage disposal in the affluent parts of the city is now being done by community participation but in the less fortunate areas garbage spills out of the houses, restaurants, hotels and market places into the street so that along both sides of it you see pavements covered by household wastes, rotting poultry residue, animal excreta, vegetable peels.

Once a calm and tranquil city, Dhaka now bears a distressing resemblance to a vast filthy construction site. The lure of happy life in the city has transformed it from a sleepy town or a manageable urban centre of the past into a bursting human hive. New arrivals are pouring in at the rate 200,000 a year crushing into an area that constitutes only one per cent of the nation's land. This high migration has been spurred not so much by rural restlessness as by sheer natural catastrophe like floods, cyclone, river erosion and joblessness in villages. Travellers may marvel at the city's gleaming skyscrapers or admire the modern high-rise apartment buildings in Motijheel, Karwan Bazar, Dhanmondi, Gulshan, Baridhara



and Banani area but the average family income is only \$30 a month. Precisely speaking, behind the blinding glitter of the new millionaires the city is failing bulk of its citizens. Even the basic rudiments of a civic life seem to be evaporating from the city.

Reports from population census council says that population density in the country is now 2000 persons per sq. mile whereas in Dhaka it would shoot up to a staggering number of 8000 per sq. mile. In view of the land space limitation coupled with great rush of people to the city, construction of multi-storied apartment blocks in an eco-friendly environment with provision for green space, spots for recreation, schools, market and games facilities for children close to these apartments is a call of the hour. But apartment blocks have sprung up in different localities of the city not accessible to motorised transports or even ambulances or fire brigade vehicles. Some of these apartments in different localities of the old town or even in the posh area have been raised on hidden sewer lines or gas pipelines. Neither RAJUK, nor Dhaka WASA nor TITAS Gas nor DCC intervened or made any mandatory check when these blocks were raised or are still being raised in flagrant violation of building codes. Such flouting of rules and regulations and manda-

tory safety provisions sometimes invites disasters of unimaginable proportions as it did in the Phoenix building collapse in Tejgaon or Savar Garments factory collapse in recent time.

Nobody disputes the fact that the need for construction of such multi-storied flats in the Dhaka city is now a historical necessity because the same space, say five kathas of land that could create living facilities for just one family comprising six members has to accommodate now 80 to 100 families comprising 1000 members at least, and these are being sold like hot cakes because people want to rush into Dhaka to have a secured living, to educate their children and to have hospital facilities when they are sick. Villages have offered them neither income nor good schools for their children nor good doctors and hospital with minimum facilities in their hour of need -- a pathetic situation that can only be attributed to government apathy.

The phenomenal growth in tall building structures in the city areas namely Shantinagore, Paribagh, Bailey Road, Eskaton, Shyamoli, Dhanmondi, Green Road other than Gulshan, Baridhara and Banani leaves much to be desired in respect of meeting the environmental needs, management of water, electricity, gas and sewerage connections and lift services.

Shockingly, most of the apartment blocks built these days in different locations of the city ignore the safety regulations to be met in different aspects. Experts in environmental and geo-technical engineering apprehend that in absence of proper sewerage line with manageable discharge capacity of the effluents -- toxic and hazardous sometimes -- the existing sewer lines might crumble down after a few years posing a serious threat to health and sanitation of the people at large. With surface drains by the side of the streets getting choked under heavy load of effluents, residents are experiencing a miserable existence.

Four million people commute everyday mostly by motorised transports in an area of 100 miles. Bereft of any subways or mass transit system most needed for such a fast expanding city, Dhaka till now is a harrowing labyrinth of streets and alleys that make no geometric sense in these days of technological innovation and fast movements. On the other hand unbridled development ate away Dhaka's past charm and blanketed it in a layer of blue haze.

Precisely speaking, tall buildings have turned to be an inevitable historical necessity to meet the growing needs of expanding population and urbanization.

But shockingly, this city of gardens as the names of different areas like Segunbagicha, Malibagh, Rajarbagh, Madhubagh and Lalbagh imply has become a victim of neglect and policy myopia. With developer-sponsored high rise apartment blocks going apace, government must see that it is pursued with a vision and planning process that ensures quality of life. Undeniably true, ensuring quality of life should be high on the agenda of city planners and city administration. If you are adding population in the city, you are also adding pollution, congestion garbage and water scarcity.

In Bangladesh, especially in Dhaka city till now we haven't seen any concrete action to check the pollution menace. Undeniably true, overcrowding, noxious fumes, power shortage water scarcity and contamination have all played a part in turning this once growing charming city into a choking hell now. But public reaction to all these human factors is mostly mute. And surely unless public takes unanimous stand, Dhaka's decline will continue.

Md Asadullah Khan is a former teacher of physics and Controller of Examinations, BUET.

PHOTOS: STAR

Open pit mining for coal Intersection of national economy, local rights and the environment

As the prospect of open pit mining for coal becomes a reality in Bangladesh, distrust shrouds the northern region of the country. Local people including the indigenous Santals in the mine area accuse the government and the company in contract, UK-based Asia Energy, of deception while Asia Energy promises foreign investment, greater energy options and increasing prosperity for the country. Phillip Gain of Society for Environment and Human Development (SEHD) reports with photos:

BORO Buski and Chhoto Buski two Santal villages lay side by side in the Birampur Thana of Dinajpur. The patch of the planted forest on the highland looks like an island from a distance. There are vast rice fields in the north and the east of the villages. The highland is luxuriant with dry-season crops such as mustard, wheat, and green vegetables. Santal men and women busily plant paddy saplings in their lowland. A line of eucalyptus lie on the horizon. A golden shower of sunshine in the evening flushes the landscapes. Inside the Santal villages, large traditional mud-houses with few windows, typical of Santal dwellings, line a village path, speaking of a lingering antiquity.

It is here, among these tidy and serene villages that the search for coal has been continuing for several years. Experts from country and abroad have frequented the area with their drilling equipment, pulling out coal from deep in the earth in 150 drilling sites. Villagers have watched the drilling activities with curiosity. They were told of coal deposits in the area and the prospect of mining. They thought the mining would bring good both to them and to the country. Later, they came to know that the method that will be used for mining requires the

removal of entire overburden from the top of the coal. It means all villages (there are more than 100 according to coal exploration experts) within a 59 sq. km radius will be evicted and the inhabitants relocated. Everything on the ground will vanish. This is the story of open pit mining and the intersection of benefits and losses of the people living in the mining area, the country's economy and the environment.

The project

Asia Energy, a UK-based company, is in contract with the Bangladesh government to mine coal in Phulbari in a scheme called the Phulbari Coal Project. An Australian company, BPH, started the coal exploration in this area. The Bangladesh government signed a contract with BPH through an open tender. In 1998, the contract was transferred to Asia Energy. Asia Energy, after estimation of coal reserve, has submitted to the government a plan of operation. The government has already granted environment clearance to the company.

The location

According to Asia Energy, 5,900 hectares or 59 sq. km. land area is required for the mine. The area

covers more than a hundred villages of seven unions in four Upazilas -- Phulbari, Birampur, Nawabganj and Parbatipur -- and part of Phulbari Sadar Upazila, under Dinajpur district. Thousands of acres of cropland fall within its boundaries.

The area of Phulbari Thana Sadar that falls within the project area has brick-built houses, schools, colleges, tarmacked roads, railroads, business facilities and so forth. Outside the township lie vast crop fields, forest patches and plantations. Beneath the expanse of beautiful landscapes lies the 38m thick (on an average) coal fossilised over 270 million years. According to Asia Energy the coal reserve in this mine is 572 million tons. The company believes, if explored, more coal will be traced in the south of the present mine.

Who benefits and who loses?

The political debate: Local versus national interest

Though the people living at the site of the planned mining project object to it, both the government and the opposition are supportive of the Phulbari Coal Project. Appointed by Asia Energy, GHD, an international organisation, prepared a report for the company that claims Bangladesh will receive benefits worth US \$21 billion over the 30 years of the mine's lifetime. Of this, US \$7.8 billion will come as a direct benefit and US\$ 13.7 billion, as indirect or multiplier benefits. The mine itself and the coal-fired plant for production of electricity will contribute one percent per annum to the GDP of the country.

The inhabitants of the mine area

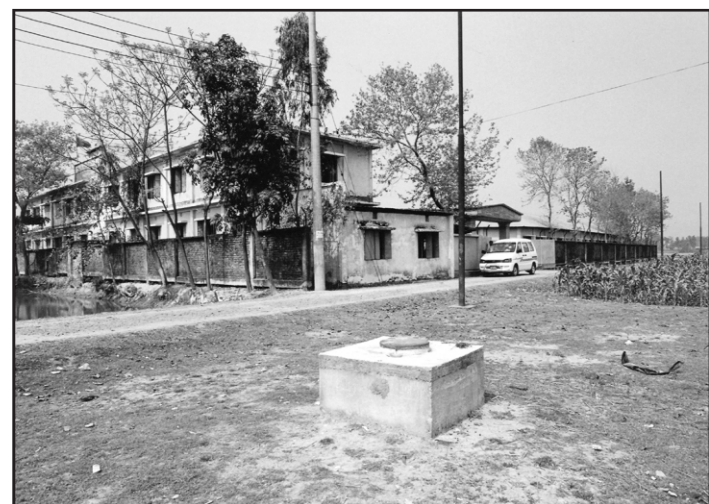
complain that people living in other parts of the country do not realise their plight, nor do they foresee the disaster the open pit mining is likely to cause to this region.

"We heard there is a coal deposit in this area. But the people engaged by Asia Energy did not let us know that the method for mining would be open-cutting which necessitates eviction and destruction of our houses, schools, colleges and all other establishments in the mine footprint. All of us, irrespective of party affiliations, are against it," says Moti, top leader of the Phulbari Raksha Committee. He is also the principal of Phulbari Women's Degree College and chairman of Bangladesh Nationalist Party (BNP) in Phulbari.

The company and the locals neither agree as to the number of people affected. While Asia Energy assessment states that 40,000 people will be displaced, the Phulbari Raksha Committee estimates that about 150,000 to 250,000 people will be affected either directly or indirectly according to Moti.

Nima Banik, a lecturer at Phulbari Women's Degree College says, "No matter wherever we are put, if we get evicted from our homes, we will lose our traditions, social organisation and businesses. These losses are beyond compensation. Moreover, we do not trust Asia Energy. Its estimate is unfounded."

M. Anwarul Islam, Asia Energy's general manager (environment and community) disagrees and responds, "We have always mentioned the idea of open pit. In Phulbari, there is no other option." His claim: "We have changed our coal extraction plan to keep most of



A degree college in the mine area

eastern part of Phulbari Upazila town outside the mine. Consequently, we will extract 20 million tons less coal than our initial estimate. We take this measure to reduce the damage."

According to the company all the damages will be compensated and the condition of the inhabitants of the mine area will be better than before. However, the aura of distrust and the demand of the locals is clear: "We do not want open pit mining." From June 2005 the Phulbari Raksha Committee has been organising processions and meetings every Saturday in Phulbari in protest against it.

National interest versus foreign interest

Asia Energy claims that Bangladesh has no risk in the Phulbari mine project. The claims that Bangladesh will receive half of the total profit accrued from the mining operation. The profit includes 6 percent royalty, 4.5 percent corporate tax and 2.5 percent import duty. The other gains of Bangladesh as the company mentions will be "a new source of energy for the country, a new commodity for export, new industries, employment opportunities, regional development, poverty alleviation, growth of nascent industry, new rail and port infrastructure."

Professor Anu Muhammad's fear is: "It is Bangladesh where the coal has been found; and a foreign company will become its owner. There is no proper way to measure the actual benefit of Bangladesh and the price it would have to pay for it. What becomes clear is Bangladesh will have to buy its own coal from the company at an international price."

Impacts on environment

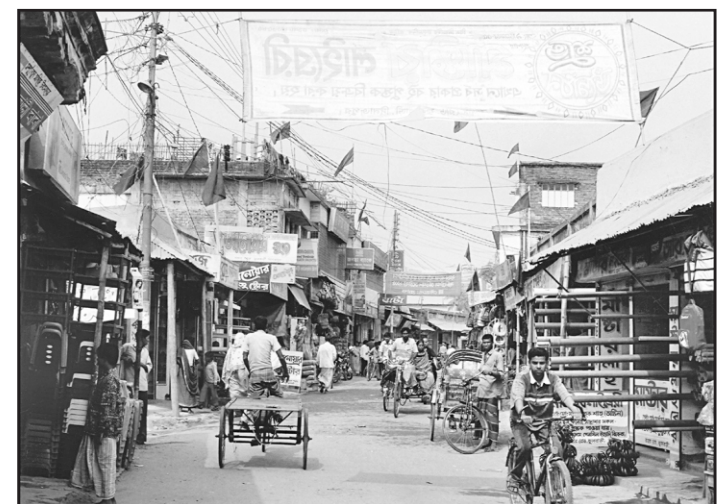
A serious concern of open pit mining is its agricultural impacts. The method requires the mine area to be completely dewatered so that the hollow of the mine does not get immersed in water. Not an easy task. Large pumps are required to suck out underground water

around the mine round-the-clock during the entire lifetime of the project. The impact on the already dry Barind Tract is obvious. Water level runs lower in Barind Tract during dry season and make it difficult for the tubewells to draw water. When dewatering starts for the mining, the shallow and deep tubewells will not draw enough water for farmers in the larger area near the mine.

Asia Energy's solution is to distribute the water pumped out among the farmers. It is an open question if the water distribution would be even-handed. The government and non-government organisations have been trying many options including tree plantation for many years now to prevent desertification in north Bengal. If dewatering in the mining area hastens the desertification process, pouring water above the ground remains a doubtful viable option for agricultural sustainability.

The Asia Energy officials inform that the average thickness of coal's layer in Phulbari is 38m. In order to reach the layer of the coal, overburden between 150 and 250m needs to be removed, leaving a thousand-foot deep hollow. Once used up, the hollow will be filled with earth and a new area will be dug out. The area filled up does not become useful in many years. According to a high official in Asia Energy, topsoil will be removed and preserved once the mining operation begins in a particular block. Topsoil will be brought back and spread on the top of the area filled in. But no one can say when the land becomes cultivable again. The other question is: will the company fill the hollow with the same care as it is done in the developed countries? Non-compliance of existing laws is a common practice in Bangladesh.

At the final stage of the mining operation, in about 30 years after the operation begins, Bangladesh will get a huge lake that according to the company will be filled up with fresh water providing a big source of water, fishery and recreation. But mining experts warn that the final



Black flags in Phulbari municipality area in protest of open pit mining

hollow, after 30 years of digging and other activities, will contain toxic substances. It may not be realistic to envision this polluted lake becoming a source of fresh water.

Handling the other forms of environment pollution is also a challenge. There will be routine dynamite explosion inside the mine to break the rocks and the coal. Heavy machinery will be set up in and outside the mine. Heavy 240-ton trucks and trains will carry the coal causing noise pollution. Coal dust will be a major source of air pollution. If the enormous amount of polluted water generated from washing of the coal is not properly treated before it is dumped into surrounding water bodies, it will kill fish and other forms of life. Further, the earth through such deep digging and many types of pollution will lose all its micro-organisms. Air pollution from burning of coal to produce electricity is a big concern. Air-polluting agents such as sulphur dioxide, nitrogen oxide, volatile organic compounds (VOC), mercury, lead, cadmium, chromium, and arsenic will contaminate earth, water, plants and animals.

Eliminating pollutants is extremely difficult. Asia Energy expects to keep the pollution within a tolerable level. However, there is a fear that the company will not adopt adequate measures to mitigate pollution because these involve much effort and cash.

Transportation of the coal is another concern. In order for marketing, the coal will be carried to the deep seaport through the Sundarbans. New seaport and railroads will be built for this. On the positive end, this will create employment and bring in revenue, but it also adversely affect the environment of the Sundarbans (the largest mangrove forest on earth). The noise and water pollution created by the Mongla Port has already become a threat to the animals, plants and other life forms in the mangrove forest. The added transportation over the 30 years of the mine's lifetime will increase

threats to the Sundarbans.

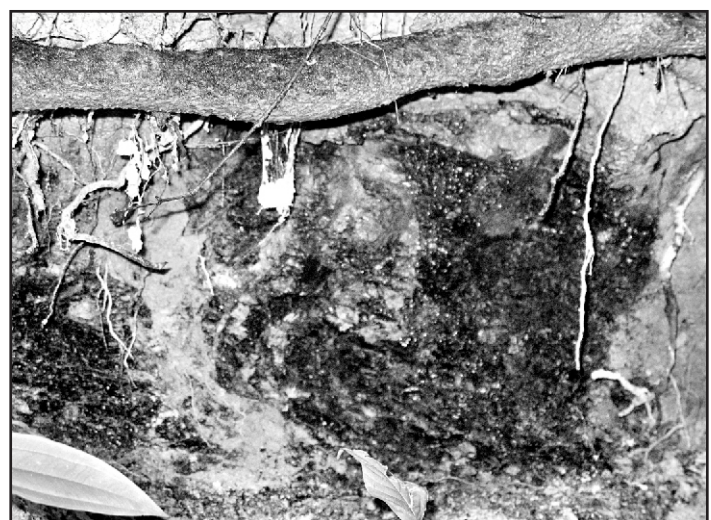
The environment and social impact assessment (EIA and SIA) of the Phulbari Coal Project has already been carried out and approved by the Department of Environment of Bangladesh government, informed the Asia Energy officials. Three hundred consultants of several international and national companies, some Bangladeshi environmental organisations and individuals have done the EIA and SIA. They have produced 2,600-page reports after 18 months of work. This is where many question if the EIA and SIA commissioned by the same company that will extract the coal have been impartial. Asia Energy claims it will do all that is needed for the protection of environment and social harmony.

Although the people of mine area and their supporters stand against the open pit project, they are not against extraction of the coal in general. Their understanding is that the ownership of the coal and fate of the affected people just cannot be handed down to a foreign company. They suggest waiting until the country develops its own mining expertise and technology. "We may give our consent when the country will be able to mine the coal resource with our own technology," says Principal Md. Khurshid Alam Moti, a top leader of Phulbari Raksha Committee. There are many others whose voices join with Principal Moti's.

Asia Energy has turned down the demand of the Phulbari people to wait until Bangladesh builds its own expertise and mining technology. It says that by the time Bangladesh has its own mining expertise and resources, the fossil fuel may not be required any longer. The company claims that it is high time to extract the coal. However, the country may need to examine at what cost it gains benefits from the coal.



A Santal woman on her crop land in the mine area



Coal in the pit