

Biodiversity in peril

Dealing with the extinction crisis is no simple matter, since much of the world's bio-diversity resides in its poorest nations, especially in Asia, Africa and Latin America. People in poor countries should not be asked to choose between their own short term survival and long term environmental needs. Since protecting the environment is such a paramount necessity, the money should come from the international sources.

MD. ASADULLAH KHAN

THE heady pace of economic growth fueled by rapid industrialization coupled with hurried urbanization that take people away from traditional employment in rural areas has contributed to the degradation of natural resources. But these natural resources are in many ways the foundation of a society and its economy. Shockingly, political economy in many countries emphasizes discounting the future value of human development, natural resources and ecological processes in exchange for short-term benefits.

Spurred by poverty, population growth, ill-advised policies and simple greed, humanity is at war with the plants and animals that share the planet. Nature's biodiversity is being destroyed by agents no other than humans simply out of greed. Every year fire caused by companies with vile greed for plantation and timber interest continue to destroy huge forest cover from Malaysia to Indonesia to India to even Bangladesh. Director of Missouri Botanical Garden predicts that if things are allowed to go on like this, during the next three decades man will drive an average of 100 species to extinction every day.

Extinction, believably is part of evolution but the present rate is at least 1000 times the pace that has prevailed since pre-history. Biologist E. O. Wilson believes that even the mass extinction

65 million years ago that killed off the dinosaurs and countless other species did not significantly affect flowering plants. But these plant species are disappearing now through greed and population pressure and people, not comets and volcanoes, are the angels of destruction. Who knows how many plant species like willow, many of them till now unexplored, have been extinct for good?

Unfortunately, the earth is suffering the decline of the ecosystems -- the nurseries of life forms. As forests continue to be decimated, the soil has lost its protective cover and lies exposed to the relentless forces of wind and sun. As reports have been gleaned, nearly every habitat is at risk. Forests in all parts of the world has fallen to lumbering, development and acid rain. Marine ecosystems around the world are also threatened by pollution, over-fishing and coastal development. The last best hope to preserve the bio-diversity remains in the tropics. Tropical forests cover only seven per cent of the earth's surface but they house between 50 and 80 per cent of the planet's species.

Even developed countries can't afford to dismiss the growing concern about this planet earth's future or so to say their own countries' environmental woes. It has been stressed time and again that variety is the spice of life. Life needs diversity because of the interdependence that link flora and fauna, and because variation within species allows them to adapt to envi-

ronmental challenges. But ironically, as the world's population explodes, other life forms continue to go extinct.

And surely humans are indulging in a risky game. Many of us are mistakenly prone to believe that we don't need the great variety of earth's species to survive.

With the alarm bells ringing, governments in many countries have turned their attention to high profile animals like tiger, elephant and rhino while most people hardly see the point of worrying about insects or plants. These are also on the verge of extinction. And extinction is a sort of environmental calamity that is irreversible. As these low species go extinct, they take away with them survival mechanism of other species. "It is as though the nations of the world decided to burn their libraries without bothering to see what is in them," said Pennsylvania biologist Daniel Janzen. Harvard's Wilson called this profligacy, the "folly" that future generations are not likely to forgive.

Humanity has already benefited greatly from the little known species. Some 25 per cent of the pharmaceuticals in use in the US today contain ingredients originally derived from the plants. Hidden anonymously in clumps of vegetation, ready to be bulldozed or burned, might be plants with cures for still unconquered diseases like AIDS and cancers. In addition to creating habitable environment, wild species are the source of products that help sustain our lives.

With the advent of genetic mapping and engineering, nature's diversity has offered many opportunities to agriculture, especially to biotechnology firms, the potent power to improve crops by transferring genes to wild strains. The most visible results are drought and salt resistant crops, natural fertilizers and pesticides.

Diversity is the raw material of earth's wealth, but nature's true creativity lies in the relationships that link various creatures. The coral in a

reef or the orchid in a rain forest is a part of the ecosystems that supports as well as offer check and balances integrating life forms into functioning communities. Given the complex workings of the ecosystems, it is never clear which species, if any, are expendable.

Biologists have identified numerous "hotspots" where ecosystems are under attack and surely a large number of unique species face an immediate threat of extinction. These troubled areas include Madagascar where 90 per cent of the original vegetation has disappeared, the monsoon forests of Himalayan foothills that include Nepal, India and Bangladesh that are being denuded by villagers in search of wood, building materials, and arable land, as well as forests of East Africa, peninsular Malaysia, Indonesia along with the Atlantic coast of Brazil and Mexico.

Because of such plundering of the forest, 976 species, throughout the world are classified as critically endangered. The animal species facing total extinction are Javan rhinoceros, Philippine eagle, Hawaiian crow, Chinese river dolphin, giant panda, Sumatran rhinoceros, and mountain gorilla.

Researchers grimly point out that our descendants would inherit a biologically impoverished and homogenized world. Not only would there be many fewer life forms, but also faunas and floras would look much the same over large parts of the world, with disaster species such as fire ants and house mice widely spread.

As it is catalogued now, humanity's food supply comes from a narrow sliver of bio-diversity. Throughout the history people have cultivated or gathered 7,000 plant species for food. Today only 20 species provide 90 per cent of the world's food and three -- rice, wheat and maize -- more than half. Natural pharmaceuticals offered by bio-diversity are also under-utilized. Only a few hundred wild species have served to stock our antibiotics, anticancer agents, pain killers and blood thinners.

The biochemistry of the vast majority, millions of other species are unfathomable reservoir of new and potentially more effective substances.

Looking more closely at nature it would become evident that every species is a masterpiece, exquisitely adapted to the particular environment in which it has survived for millions of years. But we have to be concerned about the current spasm of extinction, which has been accelerated by the inexorable expansion of agriculture and industry. Nobody can deny now that the wellbeing of the human race is tied to the wellbeing of many other species which are most important for our own survival.

But dealing with the extinction crisis is no simple matter, since much of the world's bio-diversity resides in its poorest nations, especially in Asia, Africa

and Latin America. These countries can't think of spending huge sums of money to save some species -- be it elephant or an orchid. In a nation where a sizeable percentage of the people are living below the poverty line, the question promoting wildlife is something unthinkable.

People in poor countries should not be asked to choose between their own short term survival and long term environmental needs. Since protecting the environment is such a paramount necessity, the money should come from the international sources. What is needed now is a paramount global endowment devoted to wildlife protection and forest growth, funded primarily by the industrial nations.

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'No health without mental health'

Primary health care centre is the first contact centre where people seek treatment. If mental health service is integrated into primary health care package it will be easily delivered to the mass population. It will minimize social stigma and discrimination and other barriers to seek mental health services and protect human rights of mental patients.

DR. ZILLUR RAHMAN KHAN

EVERY year, 10th October is observed as 'World Mental Health Day' globally. The World Federation For Mental Health (WFMH) initiated Global Mental Health Awareness Campaign in 1992. This year, the 17th World Mental Health Day will be observed in more than 100 countries and the theme is "Mental Health in Primary Care: Enhancing Treatment and Promoting Mental Health" -- which is very relevant to our national mental health service perspective. The day will be observed in our country at least by

National Institute of Mental Health, Dhaka at government level and by a number of NGOs on non-government level.

Our national attitude towards mental health and illness is very frustrating. Mental patients are regarded as burden on our family and society. The tendency of the family members of mental patients is to hide it rather than discuss and seek help from mental health professionals. The general idea is that, mental health treatment is costly and some even consider it a useless investment. But if they use the existing government mental health services (which must be expanded) at

token cost, in most cases mental patients could be converted into productive manpower. We do not mind spending money for chronic physical illnesses but always hesitate in case of mental illness. The problem is attitudinal.

WHO, back in 1948 defined health as "A state of complete physical, mental and social wellbeing, and not merely absence of disease or infirmity". But even after 60 years, mental and social component of health is ignored in our country.

Mental health is more than absence of mental disorders. It is conceptualized as a state of wellbeing in which an individual can realize his or her own abilities, can cope with the normal stress, can work productively and fruitfully and is able to make contribution to his or her family.

Most diseases of medical science are preventable and treatable and a few are curable. This is also true for mental illnesses. The most important issue for prevention and treatment of mental illnesses is mass public aware-

ness, in which both electronic and print media can play a crucial role.

But in some TV reporting reporters broadcast incoherent speech of mental patients in mental wards which is a breach of privacy and violation of human rights. Often producers of some TV drama misinterpret the concept of mental illness or wrongly depict the issue, which create negative attitude among public rather than creating awareness. We hardly observe any TV channel arranging any talk show on world mental health day. The print media is almost similar to that of electronic media in creating awareness.

Mind is no more a myth, rather a vital portion of the body called brain. So, there is definite relationship between physical and mental illness. Recent evidences suggest that medically ill people have increased risk of behavioral and mental illness. Patients with diabetes and brain stroke have 3 to 4 times higher risk of developing depression. At the same time, mentally ill patients have com-

mon physical co-morbid illness like cardiovascular diseases, stroke and diabetes. This indicates the urgency of comprehensive and collaborative treatment of both physical and mental illnesses. So is the necessity of mental health awareness slogan -- "No Health without Mental Health".

Primary health care centre is the first contact centre where people seek treatment. If mental health service is integrated into primary health care package it will be easily delivered to the mass population. It will minimize social stigma and discrimination and other barriers to seek mental health services and protect human rights of mental patients. The services will be easily accessible and affordable as it could be delivered in a cost-effective manner using the existing primary health care infrastructure.

It is a common misconception that urban and rich population suffers more from mental illness. From scientific research, it is evident that no age, sex, race, religion and economic status is immune to mental illness, though

there are some differences in its prevalence rate among the above variables. The National Survey on mental disorders conducted by National Institute of Mental Health, Dhaka and WHO (2006) revealed that prevalence rate of all forms of mental disorders among adult population in Bangladesh was 16.1%. For this huge number of mental patients only around 115 psychiatrists are available which is grossly inadequate (7 psychiatrists per 10 million population!). This is why integration of mental health services into primary health services package is desperately needed -- which is also the main theme of world mental health day this year.

Finally, most important issue is the change of attitude to consider mental illness as other physical illnesses, and go for identification, management and rehabilitation of mental patients in time.

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Education policy: Some suggestions

The same qualifications (Bachelor's degree) and training (B. Ed.--a new course to be designed) should apply for all teachers at the same stage. It is common knowledge and experience that teaching lower classes is much more difficult than teaching upper classes. So, for the former, more trained, qualified and efficient teachers are needed.

M. SHAMSUL HOQUE

CLASSES 1--8 are included in the primary stage. Good. But within the same stage, a segregationist policy has been proposed, i.e. the minimum requisite qualification and training for teachers of classes 1--5, HSC/SSC, and C-in-Ed., and for teachers of classes 6--8, Bachelors degree and B. Ed. This is likely to result in a serious lack of coordination and collegiality, and an unhealthy growth of tension and ill feeling between these two groups of teachers. However, the qualifications of the incumbent teachers with HSC/SSC and C-in-Ed. should be gradually upgraded.

Introduce English for Specific Purposes (ESP) for 4 credits: The proposed paper is not new--it has been in the course for many years. This is a general English paper for all students of all disciplines--science, arts, etc. The most pertinent question in the situation is: Why should a student of, say,

chemistry, and a student of Bangla study the same English (though their areas of study are different, their needs and goals are different, and moreover, they all have studied general English for 12 years as a compulsory subject)? In fact, they need ESP, the kind of English that will effectively help them study their respective subjects. So, they need English for science, English for agriculture, English for medicine, etc.

No English has been recommended for students studying engineering, law and ICT in the proposed policy. This seems to be an inadvertent omission.

Introduce mentoring as an important component of teacher development: Good training is important. Good monitoring and supervision are also important. They may be available to our teachers, but, upon leaving their training room, while they are in their own classrooms, teaching on their own (no supervisor / monitor coming), they usually relapse into their old, do-it-easy, way of teaching. This is because

their training is usually one-off; monitoring and supervision, done by their superiors (in rank and position), are evaluative and often threatening. So, these teachers show their 'best performance' to please only their bosses. To prevent this situation, we badly need mentors in addition to monitors and supervisors.

Mentoring teachers is helping them, over a long period of time, to improve classroom teaching. Mentoring takes place in a non-threatening, non-authoritative environment in and outside the school. It is de-linked with any power relations. A mentor helps the teacher like a good colleague, with friendly guidance and support through cooperative and collaborative activities in and outside the classroom, making his/her teaching useful, interesting and outcome-oriented so that learning becomes enjoyable and effective for that teacher. Thus, mentoring can bring about a genuine, sustainable change in the teacher's personal, as well as professional behaviour, thereby, improving the quality of teaching and learning.

Share the responsibility of primary education with other stakeholders to develop quality primary education, which is currently lacking: The responsibility of primary education, no doubt, lies with the government. The question of the transfer of responsibility does not arise in the case of a national centralised education system like ours--it is cooper-

ation and collaboration between different stakeholders that is most important. Think about the huge task of managing only primary education: 80 thousand schools, 300 thousand teachers, 18 million students and (developing, printing and distributing) a staggering 80 million textbooks. The task is often found to be too Herculean for the resource-strapped government to do alone.

On the other hand, competent private organisations/NGOs (with adequately-trained, experienced professionals and with little or no financial constraints) can collaborate with the government to effectively contribute to developing suitable courses, efficient teachers, appropriate textbooks, in fact, any curricular activity. In many developing countries (e.g. India, Sri Lanka), competent private organisations/NGOs are often asked to provide help in developing some particular component of the mainstream curriculum, for example, to produce a teacher's guide in a particular subject and to orient teachers in using the guide. In this way, all sectors, both public and private, should own the national education system of a country and can best endeavour to attain its excellence together.

The proposed policy statement under primary education just mentions the government's responsibility nothing about the responsibility and the

initiatives of the private sectors, let alone their collaboration. It seems to me that the statement reveals the time-old bureaucratic mindset of the policy makers that ignores the potential advantages of private sector cooperation, patronage and collaboration for developing and implementing a good, sustainable primary education system in the country.

Make special provisions for English Language Teaching (ELT): English was introduced from class 1 in 1990. Since then, it has proved a complete waste of national resource (both material and human). To teach English, especially in classes 1-2, by inefficiently qualified and trained teachers, and inappropriate teaching materials, results in learning inadequate for learners to cope with English in their successive classes. The problem is compounded by the kind of English learned at this initial stage, which has to be unlearned during the later stage(s).

However, considering the crucial need for English in the present-day ICT-based globalised world, the proposed policy has retained English's present status (from class 1). I strongly support it on one condition: There must be designated English teachers who must be given specialised training in ELT. The currently run 6-day subject-based training at URCs, for all teachers of all subjects, will not make any change in English teacher development, and

hence, cannot prevent (but rather will continue multiplying) the wastage we are presently incurring in the name of teaching English.

Therefore, we propose that a permanent body, say, a National English Language Centre (NELC), be set up, as found in many developing countries of the world. The centre, supported by the Government, can get technical support from a project, if necessary, but will work as an effective autonomous body. The centre's specialists and professionals will work as an independent watchdog on any ELT programmes and issues. The main functions of NELC will be:

- To coordinate ELT activities across all levels, i.e. primary, secondary and tertiary.
- To accredit various ELT courses offered by private institutions, including commercially mushroomed ELT centers;
- To monitor ELT activities at all levels to help MoE and MoPME implement the national ELT policies (to be made);
- To liaise with MoE and MoPME and professional, technical support/link bodies, both within and outside the country;
- To carry out research on ELT issues;
- To suggest measures for improvement.

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