It's Not Out of Woods

If nuclear tests were to be taken away from the BJP regime, there would be nothing for it to show, good or bad. It has been a non-performing government.

THE Bhartiya Janata Party-led government completes its 100 days in office this week. Coincidence has it that the 18-month-long emergency, which Mrs Indira Gandhi imposed, will also be 23 years old this week. Although the BJP fought her tooth and nail yet it has copied her dictum on governance: It does not matter how you wield power but it does matter whether you are in power.

Comparisons are odious. Still there is no running away from the fact that certain similarities between Mrs Gandhi's rule and the BJP's 100 days are chillingly familiar. To her, the end was important, not the means. The BJP has followed the same path while deciding on nuclear test. To stay in power was necessary, not to assess the repercussions on the country or the region.

Like the BJP, Mrs Gandhi too got acclaim after proclaiming the emergency. Trains ran on time and government servants sat in their seat. The response dwindled quickly. In the same manner, enthusiasm over nuclear tests is dying as rapidly as it was spreading. As the dust settles down, the BJP faces more questions than it can an swer. Does it mean, as Mahatma Gandhi said, wrong means will not lead to right results?

Leave the ethical doctrine apart, even from the practical point of view, the BJP has not acted wisely. Before it came to power, India had cosy relations with America. Pakistan was not friendly but not bellicose and the distance between New Delhi and Beijing was lessening month by month. The BJP has put all the three countries on the same side. Their axis, if not hostility, can cost the nation dearly. There are reasons to believe that it is happening. Washington's faith in Beijing to solve the Kashmir problem is one indication. India is many a time superior to Pakistan in conventional weapons. But nuclear tests, which Islamabad has also conducted, have put the two countries at par. The BJPled government has initiated the type of cold war in the region as was once witnessed between the US and the Soviet Union. And Kashmir, which Home Minister L K Advani had

HERE were 15 Ministers of

Academies and 17

Chairpersons of National Re-

search Councils, representing

36 Third World countries, pre-

sent at the inaugural meeting of

the Third World Network of

Scientific Organisations

(TWNSO) at Trieste, Italy, dur-

ing 4-6 October 1988 when the

following declaration (known

as Trieste declaration) on sci-

tal importance of science in so-

cio-economic and cultural de-

velopment and technological

progress, and keeping in view

the recommendations of the

South Commission pertaining

to the crucial role of science in

the Third World, as mankind

approaches the 21st century,

the members of Third World

Network of Scientific Organi-

sations present at the meeting

held in Trieste from 4-6 October

1988, resolve to work towards

giving science and technology a

position of highest priority in

their own countries and to

strengthen their collaboration

with other countries of the

A clear picture on the impor-

tance of science and its relation

with the development of South

emerges from the above-men-

tioned declaration. A detailed

analysis is given by Professor

Abdus Salam in his "Notes on

Science, Technology and Sci-

ence Education in the Develop-

ment of the South". Creation,

mastery and utilisation of

is the basis of overall develop-

ment of a nation. By and large,

we are in poor realisation that

science can be applied to devel-

opment. In Japan at the time of

the Meiji Restoration around

oaths. "One of the oaths set out a

1890 the Emperor took five

national policy towards science

- "Knowledge will be sought and

acquired from any source with

all means at our disposal, for

the greatness and security of

Japan". There are three reasons

lagged behind in our country.

Commitment Towards Science

alisation of science and tech-

nology for our national devel-

education and little expenditure

on science and technology.

why science and technology

A. i) Lack of Meaningful

We have very much poor re-

modern science and technology

South as well as of the North."

adopted.

ence and technology was

"Recognising the fundamen-

Science and Technology,

Presidents of

haughtily flaunted as India's backyard problem, has come to acquire international attention. In less than 100 days the BJP has converted a bilateral issue into a world problem.

The emergency was a political decision meant to control anti-Congress opinion in the wake of Mrs Gandhi's unpopularity. The BJP's decision was also for political considerations. It wanted to firm up its dithering coalition. The party thought it would get kudos for having put India on the nuclear map. But Pakistan's tests have made many people wonder if New Delhi was right in its decision to go nuclear. Like Mrs Gandhi, the BJP has also tried to change the country's agenda.

What it means is that the BJP-led coalition is conniving at efforts to communalise the atmosphere. In fact, communalism has increased since the

advent of Vajpayee's government. The Vishwa Hindu Parishad (VHP), a member of RSS parivar, is openly talking about the Hindu Raj. The debate in Parliament showed that the BJP was not worried over jingoistic attitudes. At a time when the party should be wooing people for consensus it is raising issues which will further divide the nation. Once again history is sought

to be distorted. The constitution of the Indian Council for Historical Research is the govern-

sessed, although the US ambassador in India has warned that they will cost billions of dol-

The manner in which uneconomic expenditure continues unabated shows that there is no mood of austerity, which is a must. The government would have looked more purposeful if it had paid heed to the Pay Commission's advice to go back to six days a week and trim the bureaucracy by 30 per cent. Pakistan has at least taken some steps to cut expenditure and has appealed to its people's nationalism to help build the country. In India there is no effort to sink differ ences. The BJP is more to blame because it does not seem to be rising above party considerations.

In fact, if nuclear tests were to be taken away from the BJF regime, there would be nothing for it to show, good or bad. It has been a non-performing government. The stability plank which won the BJP 181 seats in . the 545-member Lok Sabha has turned to be hollow in the face of pressure by AIADMK chief Jayalalitha. Had Mamata Banerjee of Trinamule Congress from West Bengal followed suit, the Vajpayee government would have collapsed by this time. Still it is not out of

The only good step which the BJP has taken is the appointment of top police officer Raberio, posted in Punjab at the height of militancy, to process the police commission's recommendations, which Mrs Gandhi had rejected only because the report was prepared when she was out of power. However, there is no attempt to overhaul the administrative set-up. The government is too loose, too secretive and too slow. Vajpayee seems to have opted for a bureaucratic approach to problems.

Challenges of poverty, unemployment and illiteracy have not been met; even the work has not started, although the National Agenda had made several claims. The impact of US President John Kennedy's administration was felt in the first 100 days. Maybe, Vajpayee would perform better in the next 100 days if he is not pulled down or left alone.

Violence in the Cruellest Months It is time that the political and the intellectual managers of our society and leaders of law enforcing agencies

spectre continued to haunt all America in the "cruellest months", the name of the spectre was violence by the young. Late March found all USA shaken by fright and concern at a new and terrifying wave of youngsterviolence run amok. The prime time TV news (on the 24th March) was painted red with the blood of four school girls and a teacher in the state of Arkansas. Horrifying details emerged hour by hour as major US TV channels started covering the event live. The story seemed absurdly, if also tragically simple. A thirteen year old boy was disappointed and hurt by the rejection of deeper and steady friendship from a girl class fellow. He was determined to take revenge. A fellow student reportedly told others that the alleged killer earlier muttered that he had "a lot of killing to do." He got help from

someone even younger, an eleven year old schoolboy. Together they reportedly raided the personal armoury of the grand father of the thirteen year old. They got assault-rifles, meant for the grandpa's hunting expeditions and assorted handguns and loaded them in a microbus. Then they allegedly proceeded to the school, set the fire alarm ringing and sprayed a bewildered woman teacher and four helpless fellow girl students with mindless bullets. It was a frenzied repeat of "killing fields" on a minor scale. The girls killed included the one who had rebuffed the thirteen-year old al-

> lances. The entire scene was fraught with terror and grief of mind wringing tragedy. The alleged young killers were taken in police custody. The school and the community seemed shocked beyond grief and the kith and kin of the alleged killers found themselves in a situation beyond the bizaare and the unthinkable.

leged killer. The TV news

showed policemen and medical

staff hurriedly putting the

bloodstained bodies of the vic-

tims in stretchers and ambu-

All America was in a state of shock despite the fact that violence by the young was not something new to this prosperous and mighty land. This is the land of well organized and systematic personal freedom where the right to "life, liberty and pursuit of happiness" is guaranteed by the constitution. Yet the freedom that is the envy of the wor'd a large so easily enjoyed by the teeming milAmerican citizen is free to buy and possess arms of virtually any description including deadly and powerful assault-

Death Wish: USA and Bangladesh

Mizanur Rahman Shelley writes from USA

wake up and take early and meaningful action. They would do well to remember that their children too are part

and parcel of those young ones who are under siege by near anarchic violence.

unfettered purchase and possession of weapons, particularly heavy duty ones, on the basis of

months, took some administrative measures to restrict import into the USA of assaultweapons like the Uzi sub-machine gun and Kalashnikov ii fles. Some hope that this measure could help restrict armed violence by limiting the scope of purchase and use of the deadlier arms. One has to wait and see. The problem of violence may lie deeper in the American phyche and history. Violence, especially violence with arms, has inescapably studded the course of the evolution of America. The early colonizers had to wage severe and sanguinary struggles against the indigenous Red Indians of North America. The long and bloodstained series of battles and wars between the original natives and the colonialists from Europe resulted in the decisive defeat of the former and their confinement in. 'reservations'. The Wild West was also won princi-

pally through superior violence. A violent war of independence against the forces of the British Crown wrested the freedom of the American colonies in 1776. Nearly a century later a violent civil war put an end to slavery in the Union. Those were, by and large instances of political violence which could be and were justified on certain grounds of practical morality. The violence that stalks the USA now is, however of a different kind. It has no reason, no

justification. At best, this violence that continues to steep America in tears of sorrow can be traced to the ills of a prosperous society that lacks adequate family cohesion and social harmony and integration. At worst it can be traced to the mindless frenzy of monsterous psychopaths so horribly depicted in Hollywood films like "The Silence of the Lambs" or "Casino".

One wonders whether the vision of a violent world and an existence feeding on armed violence contribute significantly to the growth and sustainance of an inescapable culture of violence especially among the American young. Recent surveys have confirmed that the American TV is proving itself to be a major vehicle of glorification of violence. A full 51 per cent of US TV programmes glorify violence and 82 per cent of the major TV channels display violence in various forms in their daily telecasts. As commentators say, these programmes adversely affect the minds of the young encouraging them to believe that "violence is "necessary, desirable and harmless". "They do not know" the commentators add, "what is life and what is death". No wonder that the misled and the delinquent young Americans. teen agers kill and injure often without knowing what they are doing. As May began, viewers all over the world were treated to a poignant spectacle on TV screens: five thousand pairs of shoes were laid in long, sad rows before the headquarters of the US Gun Manufacturers and Sellers Association. These were the shoes of the young persons who were killed by gun wielding people, often very young ones. This heart-rending event was organized by those protesting such shocking violence and demanding that the gun makers do something to stop wanton use of weapons by the young in the USA. I remember something that city manager of San Francisco. Mr Sarsfeld told me in

April 1980 at the city hall, "three fourths of the crimes in San Francisco were committed by the young under the age of seventeen. Ours is a city afraid of its own children". One could paraphrase him to say toda, that the USA is a country afraid of its own younger generation as violence among the young with easy reach to arms increase with every passing day.

Such terrible violence

among and against the young is

not exclusive to the USA alone.

It is a worldwide phenomenon.

The developing countries including Bangladesh, already burdened by the crushing weight of numerous politicoeconomic problems are facing fast increasing incidence of violence by and against the young. Easy and rapid communication including the Internet and Satellite TV now instantly carry the news of such dire happenings across the world. One feels at once worried and sad while receiving disturbing word about Bangladesh while one is abroad. The tragic happenings culminating in the shocking murder of teen age Shazneen, the daily reports of young even baby girls being violated and frequently maimed and killed by monsters in human forms sadden one beyond shock and grief. It is different in the USA where the laws are good and strong and the implementing agencies are capable and quick. Even with this advantage, the US society seems unable to adequately tackle the problem. In Bangladesh (and countries in similar situations) the inadequacy of governance and the inability of the law-implementing machinery further worsen the scenario. In recent decades strong laws have been introduced but the implementing machinery have hardly kept pace with the demands posed by the rising and expanding tide of violent crimes. The society is justifiably worried and concerned. Associations advocating and protecting human, women and children's rights are not alone invoicing their protests and concerns. In recent days even business associations and Chambers of Commerce and Industries have joined them. It is time that the political and the intellectual managers of our society and leaders of law enforcing agencies wake up and take early and meaningful action. They would do well to remember that their children too are part and parcel of those young ones who are under siege by near anarchic violence.

BETWEEN THE LINES

Kuldip Nayar writes from New Delhi

If she ever gets a parenthesis in history it will be because of her abortive attempt to make India an authoritarian state. The BJP wants India to be a right-wing militant state. It has pushed the country to a different direction, from peace to aggressiveness. from conciliation to confrontation.

As it happened during the emergency, the decision-making power is getting concentrated to a few hands. Then the persons were: Sanjay Gandhi, Kamal Nath, Pranab Mukherjee and Bansi Lal. Now the command is with the RSS. Its Man Friday, Advani, lays down the law. Had Vajpayee free hand, the party would not have lost the ground so rapidly as the dismal result of assembly byelections has indicated. Vajpayee's statements make sense but there is more rhetoric than substance. Still no leader in the BJP or, for that matter, the RSS has endorsed Vajpayee's assurance that if they lose the Babri Masjid-Ram Janambhoomi case in the Supreme Court, they would honour the verdict and not build the temple. On the contrary, BJP Vice-President K Sharma has reiterated that the party was committed to build the temple, even though the government stand was difment's prerogative. But it cannot - and should not - have historians who wear BJP-RSS badge on their sleeves. What it conveys is that the revision of history is on the top of the BJP agenda. Such an attempt was made during the Janata rule (1977-79). But unlike the allies of the BJP-led coalition, the Janata government ministers were assertive enough, and they did not allow the erstwhile members of Jan Sangh to have their way.

Besides nuclear tests and the

mandir, the government has to its credit (or discredit) this year's budget. It should have given a firmer idea of BJP economic policy. But the budget is neither Swadeshi nor Videshi. It is an eight annas in a rupee. There is no direction. The manner in which Finance Minister Yashwant Sinha has gone about cutting, chopping and correcting the different budget proposals shows that there was no prior thinking. Most of the measures, which have been suggested, are a shot in the dark. If they succeed, they succeed; if they do not, they do not. The worst fallout will be inflation. It is already 6.5 per cent. The figure will soon reach 10 per cent. The burden of economic sanctions is yet to be as-

lions in the USA some times seems to be restricted by unimaginable violence that gives life and personal liberty short shrifts. The freedom that the Americans are constitutionally entitled to also include "the right to bear arms". The

weapons, usually reserved for the military and security forces in other lands. President Clinton has been trying to build his case against

the shock and hurt caused by gun toting teen agers and adults among the wayward section of the American population, indulging in horrible crimes against the person and property of the vast majority of innocent and peace-loving people of the USA. He has not been very successful. The powerful and mighty "gun lobby" in the states has steadfastly resisted all attempts to reform laws relating to the purchase and possession of weapons. The veritable shield of those who want to retain things as they are, is the National Rifles Association (NRA). It has been consistently defending the constitutionally guaranteed right of Americans to possess and bear arms without interference from federal or state authorities. "Guns" they say, "do not kill people. People kill people". the gun, apparently, is not at fault as far as they are concerned! President Clinton in recent

Foundation of Science and Technology

A Solid Basis for Overall Development in 21st Century

by Dr Mofiz Uddin Ahmed

ii) No Commitment to Self-Reliance in Technology

tional and Legal Framework necessity to have institutional

ment of science and technology. Apparently, among these, the most important was the Law for the Promotion of Technology Development of 1972. This law was passed to encourage the private sector to adapt and improve imported science and technology, and to develop domestic science and technology through the R&D activities of government subsidised laboratories. The government took a follow-up step in 1977 by extending this law, encouraging tax and financial incentives to a wider range of industries, while making Research and Development (R&D) activities mandatory for strategic industries. Presumably all these laws were enforced. It is this type of care and concern for the utilisation of Applied Science and Technology without which no amount of expenditure of science and technology is likely to be meaningful.

iv) The Manner of Science Promotion

Science depends for its advances on towering individuals. An active enterprise of science must be run by scientists themselves and not by bureaucrats or by those scientists who may have been active once, but have since ossified. Science flourishes on criticism and toleration of opposing views. This has not been zealously safeguarded within our societies.

The Four Areas of Science and Technology Civilian science and technology may perhaps be divided

opment. The consequences of this lack are the universities without cultivation of science. research centres without mission and necessary support. tion; 3) Conventional Low" sub-critical and isolated com-Technology; and 4) Sciencemunities of scientists, weakbased 'High" Technology. ness in scientific and technical

A) Basic Sciences

these:

Sciences.

of Sciences.

1) Physics (including Geo-

physics and Astrophysics); 2)

Chemistry: 3) Mathematics: 4)

So far as developing coun-

plines who could act as refer-

ences to whom one could turn to

discuss the inevitable scientific

problems which arise when ap-

Nepalese government showing

no clear policy to control man-.

ufacture and consumption of

Health Services and Resource

Centre (PHSRC), said Nepal

produces 6,000 tonnes of to-

bacco annually. Three major

cigarette factories in the coun-

try manufacture 6.6 billion

sticks every year. It is estimated

that an equal quantity of

cigarettes is brought into the

from smoking are on the rise.

cigarette companies are spread-

ing their operations in this

country. In the last two to three

years, multinational cigarette

producers like Marlboro have

Even as health problems

country legally and illegally.

The study, by the Primary

tobacco.

ported by science transfer. iii) Inadequate Institu-

There are at present five subdisciplines comprised among

We do not have a national

goal and policy to strive for self-reliance in science and technology. We have paid little heed to the scientific base of high technology. Technology transfer should always be sup-

To achieve self-reliance in science and technology, there is and legal enactment. For example, creation of Tala Institute of Fundamental Research (TIFR) Korea Institutes of Science and Technology (KIST), the Korea Advanced Institute of Science (KAIST), the Korea Technology Finance Corporation (KTFC) and others. While on the legal side, there was the enactment of several laws for the develop-

into four categories of 1) Basic Science; 2) Sciences in Applica-

21st century is knocking at the door and we are living in a global village of information technology. Acquainting with the experience of nearby countries who are on the strong footing of science and technology, we should immediately start the creation of the solid foundation for the development of our nation.

ronment and Pollution; (5)

Earth Sciences (including Irri-

gation and Soils. Meteorology

and Oceanography, Minerals

application of scientific

Exploitations, as well as Seis-Biology; plus 5) Basic Medical mology). As a general rule, research Research and training for Basic Science is conducted in and develoment in applied sciences are carried out in the the universities or in the research centres specifically cre-North under the auspices of reated for this purpose in the search councils or by private North. As a rule, these are industry. This includes refunded by National Science search, development (adapta-Foundations or by Academies tion and modification) and

methodology to developmental problems. The research effort, tries are concerned, by and in order to the effective, must be large we have tended to neglect supplemented with first-class this area of science assuming. extension services. for some reason that we could It is important to realise live off the scientific results obthat the distinction between tained by others. This has been basic and applied sciences on an unmitigated disaster in that the one hand and applied sciit has also deprived us of men ences and technology on the and women who would know other is not absolute. There inabout the basics of their discievitably are gradations.

> Technology The five sub-areas of this

C) Conventional "Low"

plications of science are made. (1) Bulk Chemicals: (2) Iron B) Science in Application and Steel and other Metals One may list five areas of Fabrication: (3) Design and sciences in application: These Fabrication in (indigenous) Inare (1) Agriculture (including dustries (like jute and leather or Livestock, Fisheries and automobile industries etc.); (4) Forests); (2) Medicine and Petroleum Technologies; (5) Health; (3) Energy; (4) EnviPower Generation.

Here no new scientific principles remain to be discovered. However, developmental work relating to design, adaptation and modification, is important. This is the traditional area of craftsmanship and skills - the science employed yesteryears. Thoroughness (in all aspects in the manufacture and after services), beauty of design, the quality of workmanship, cost, and manufacturing - competitiveness are all-important. These are just

cient. This is also the classical area of negotiated technology transfer and the area on which centrally-planned economies of the second world as well as the developing countries have so far placed their strongest emphasis. Any country which wishes to industrialise will have to develop one or more of the technologies listed above (as, for example, Japan and South Korea initially had to).

the areas where developing

countries should not be defi-

D) Finally, there are five areas of science-based "high" technology which, in the conditions of today, may comprise:

(1) New Materials (including composite materials and High Temperature Superconductors):

(2) Communication Science which consist of two types of sub-disciplines: (2a) Microelectronics (including development of software.

microprocessors, computer-

aided design and eventually,

fabrication of microchips); and (2b) Photonics (including lasers and fibre optics); (3) Space Sciences; (4) Pharmaceuticals and Fine Chemicals (5) and finally, for the 21st century, Biotechnology, and gene-splicing, so full of promise

of a true revolution in the methods of agriculture, energy and medicine. "High technology differs from classical "low" technologies in that high expertise in the relevant basic sciences (like physics or chemistry, or biology, or mathematics) is crucial.

The materials used are minimal in their bulk and size. Very few of the developing countries, with the exception of the "Confucian belt" countries like China or Singapore - or Brazil are conscious of the need for or have made progress in 'high" technology, the general feeling being that this whole area is beyond them. It is this feeling of lack of interest and faith in their own scientists

that one must fight against

The PHSRC this week organ-

ised a meet of experts to thrash

lies here. This is on account of the enormous value-added potential of the industries based on "high technology" and the possibilities of exporting its products. There can be little 'high technology transfer" from the North (unless this is of yesteryear's technology) because no one will now want to sell one has to learn to reinvent from published literature. Of the four aspects of sci-

since the future undoubtedly

ences and technology which have been mentioned above, the first to be developed so far as our countries are concerned, is conventional "low" technology. The next may be science in application. (This is assuming that expertise in basic sciences is available). The last to develop, as a general rule, is science-based "high" technology."

the foundational theory of modern astrophysics. Jagadish Chandra Bose of Bikrampur had shown the world that the same harmony of life flows in the plants. Besides, we are proud of Dr Kudrat-I-Khuda, Shah Fazlur Rahman and others. Ours soil is very much fertile and same fertile is its people. If we can stop the brain drain and cultivate our own potentialities, the nation would not only contribute to its development but also to the world science. It is our firm convic-

"Bose-Einstein Statistics" at

Curzon Hall of Dhaka Univer-

sity. Our best son of Kaliakoir,

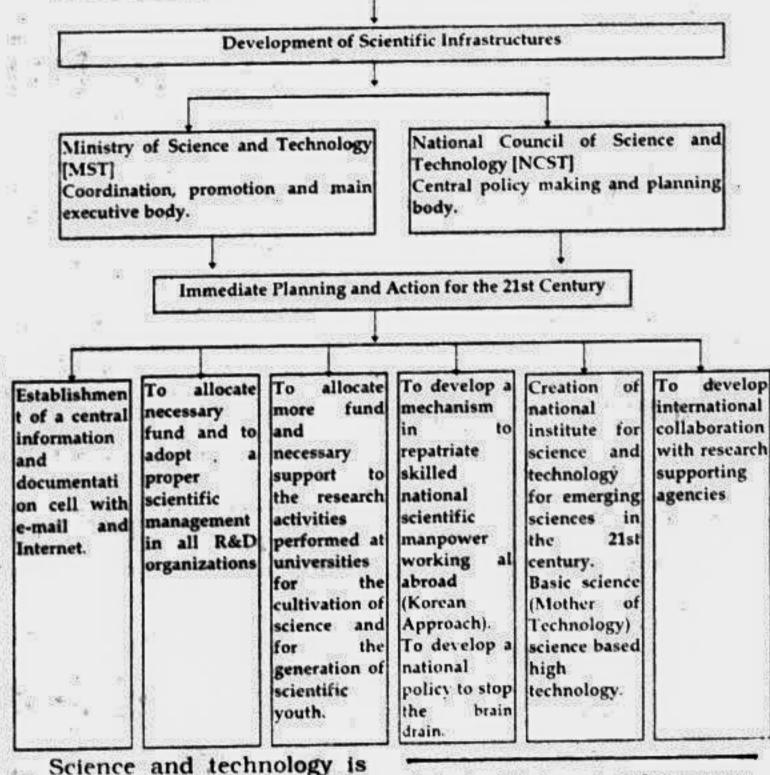
Savar, Meghnad Saha created

We have no time to be in late. 21st century is knocking at door and we are living in a

Perspective Plan for the Development of Science and Technology in Bangladesh

Political Commitment / Ar in the Parliament

Science and Technology is the Basis of Over at National Development



the key to the development of a nation. The nation who has done earlier commitment in this regard, has progressed faster. The countries of same socio-economical structure like India, China, Japan and Korea are of best examples. As a country of rich culture and heritage, we have also similar contribution in science. S N Bose, at the same level of Albert Einstein did the pioneering work of

global village of information technology. Acquainting with the experience of nearby countries who are on the strong footing of science and technology. we should immediately start the creation of the solid foundation for the development of our

nation.
The author is the Professor and Dean of School of Science and Technology of Bangladesh Open University.

Consumption of Tobacco Soaring in Nepal

Deepak Gajurel writes from Kathmandu Smoking in Nepal has increased 1,200 times in 15 years. a study has revealed, with the

The study, by the Primary Health Services and Resource Centre (PHSRC), said Nepal produces 6,000 tonnes of tobacco annually.

been capturing the Nepali market.

It is estimated that 30 per cent of the 20 million population of Nepal are habitual smokers. This high level of tobacco consumption has resulted in all kinds of health problems. PHSRC president Mathura Shrestha said 90 per cent of the deaths caused by cancer were due to tobacco consumption. "Eighty per cent of the respira-

tory and heart diseases are

caused due to smoking," he said.

spread of tobacco use in Nepali

Alarmed by the increasing

society, experts have begun demanding a complete ban on tobacco advertisements. Studies worldwide have shown that advertisements have a psychological effect, especially on the youth, and induce them to take to smoking. Close to half the advertise-

ments on television, radio and newspapers in Nepal are of tobacco products. Almost all major sports events are sponsored by them and the government appears happy to collect the revenue. Nepal does not have any law to regulate tobacco ad-

The Agent of the control of

out ways to convince the government to ban such commercials. "The lack of commitment among the policy makers, industrialists and the intelligentsia is the cause for the ever growing production and consumption of cigarettes," Assistant Minister for Social Welfare Kamala Pant confessed at the

> "The government must come up with a strict law on advertisement in order to ban the ads of cigarettes and other commodities that are a health hazard," experts demanded. The participants stressed the need to accelerate an awareness campaign on health hazards of tobacco.

- India Abroad News Service