

Chamoli a warning for Himalayan planners

The Chamoli disaster is the curtain call for policy makers to prioritise environmental conservation over non-green developmental projects and admit the reality of climate change and global warming impacts.

A section of Nanda Devi glacier collapses on the morning of Sunday, 7th February, at Chamoli district of Uttarakhand, causing enormous damage. About 150 people are missing and the glacier as well as landslide have caused massive damage to the two dams on Rishi Ganga and Dhauli Ganga.

This disaster is not a sudden event, rather can be linked with the developmental activities in the biodiversity rich Western Himalayan heartland. Chamoli had already been in focus on 29 March 1999 due to the devastating 6.8 Richter earthquake that had resulted in the death of over a hundred people. Geologically this region is under severe risk due to the ongoing crustal shortening along the 2400 km long northern edge of the Indian plate. So, the whole Himalayan region is under earthquake risk. Being in an earthquake prone zone as well as in the biodiversity rich western Himalayan eco-region, these mountain tracks and valleys must be excluded from developmental plans.

The evergreen broadleaf forest of Western Himalayas is under serious risk of climate change and ever increasing anthropogenic foot print. This ecosystem is dominated by oaks. It is the home of endangered fauna such as the Asiatic black bear, leopard, the Himalayan tahr, and Himalayan serow. Around 315 species of birds inhabit these forests - notable amongst them are the white-cheeked tit, white-throated tit, spectacled finch, Kashmir flycatcher, Tytler's leaf-warbler, orange bullfinch and Kashmir nuthatch. The Himalayan quail is now debated to be extinct from this region.

Glacier melting is the major impact of global warming caused by climate change. The global land and ocean temperature is rising by 0.18 degree Celsius per decade since 1981. A National Oceanic and Atmospheric Administration (NOAA), USA report predicts that the global surface temperature will be 0.5°C warmer than the 1986-2005 average. Globally, this rise in temperature trends is melting the glaciers and ice caps. US National Snow and Ice Data Center reported that the Arctic ice sheet has melted down drastically over the decade and now only 3.74 million square kilometers remains. Greenland glaciers lost a record 532 billion metric tons of ice in 2019. The Antarctic ice sheet also got a record blow from global warm-



ing with an ice mass loss of around 252 Gigatonnes per year between 2009 and 2017.

Climate change induced global warming is also the major reason behind massive melting of Himalayan glaciers. A 2008 report indicates that the Gangotri glacier, the lifeblood of the Ganges river system, has receded 1,500 metres in the last 70 years. Nanda Devi glacier, the reason behind the current predicament, has shrunk 217 per cent in 2017 compared to its size in 1970. Reduction of these glaciers not only foretells an environmental catastrophe but also indicates a looming shadow on the food security of the nation. Ganges basin accounts for only 26 per cent of India's land area but supports about 43 per cent of the country's population.

With all these major indications of environmental failures, the nation's developmental machine has not refrained from exploring the biodiversity rich Himalayan region. The commissioning of two hydro-electric power plants in the earthquake-prone and environmentally sensitive Chamoli region is debatable. India ranks fifth in the world in terms of its hydroelectric power generation capacity, but this accounts for only 12 per cent of nation's power production. But exploiting the hydro electric potential always comes with a note of caution because it can result in tremendous damage to the environment. A 2018 report indicated that the state of Uttarakhand has 37 operational hydroelectric power projects while 87 more are going to be com-

missioned in future.

Stone quarrying, blasting of mountains and construction activity near the Rishi Ganga and Dhauli Ganga may be the triggering point for the recent disaster at Chamoli. With recent EIA, 2020 amendment draft, small scale hydro electric projects can escape environmental clearance regulations. This can have negative impact in this region as more and more such projects can be commissioned without any environmental impact studies.

Development is taking a huge toll on the environment worldwide. In the context of the Western Himalayas, sustainable eco-friendly developmental models need to be adopted as compared to resource exploitive methods.

Yet, another disaster in the risk-prone Chamoli region is the wake-up call for policy makers to revisit their priorities for development in this biodiversity rich eco-region. Nature needs to be preserved in the pristine Western Himalayan ecosystem. Climate change is a reality and the extreme weather events across the globe are a testament to this fact. Western Himalaya needs protection and eco-friendly sustainable development rather than building hydro-electric power generation units, promoting mining or stone quarrying. Only then can recurrence of these disasters be averted.

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Assessing development sans GDP

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Economic development can be viewed from different perspectives, but the overriding theme is one of improving human well-being. Although economic development is commonly measured by growth in the gross domestic product or GDP, its shortcomings in representing the well-being of a nation are well-known. GDP ignores non-income aspects of well-being, it does not take into account the environmental damage caused by economic activities, and it tends to ignore or undervalue things that contribute to the quality of life but are not amenable to valuation in monetary terms. The estimation of GDP is based on market prices that reflect society's preferences only at the given distribution of purchasing power in the economy, which is often highly unequal.

The most striking example of market prices not doing a good job is perhaps provided by such precious metals as gold or diamond, which not only happen to be perhaps the least useful among all minerals, but also the mining of which causes huge environmental damage. The idea of gauging economic development by indicators other than GDP, such as the Human Development Index, or other measures that reflect footprints of environmental damage, has grown out of the dissatisfaction with GDP.

When a visitor from a less devel-

oped country arrives at an affluent, or a relatively more advanced country, he can see the difference instantly from casual observation; he does not have to check with publications of the World Bank or the UNDP to find the relative ranking of that country in terms of per capita GDP or the Human Development Index. Knowing what those apparently visible signs of development are may sometimes help one to have a reality check on the claims of his government regarding economic development and may also reveal some missing elements of development in his own country.

So, is it possible to list some readily visible indicators of development in a way that a scoring system based on those indicators can reasonably correspond to the degree of development across countries? After all, a student of economics, doing elaborate statistical exercises in measuring and comparing economic development across countries, should not be accused of missing things which even the untrained eyes of a visitor can easily spot. Leaving aside a visitor's first general impression about how orderly the immigration procedures are at the entry airport, the signs of development will be obviously more detectable in metropolitan areas since that is where economic development has the most impact.

The following could perhaps

serve as a tentative list: (1) The quality of public transport - whether a time schedule is maintained and passengers get in and out at fixed stops and not in the middle of the road, and the very look of the vehicles; (2) How orderly is the traffic - adherence to traffic rules and the extent of sound pollution through honking, whether roads are well maintained and there are not many potholes, how much priority is given to pedestrian facilities, and the extent to which the sidewalks of main roads are crowded by hawkers, vendors and make-shift shops; (3) The quality of tap water, the efficacy of the waste management system and the availability of public toilets; (4) The availability and quality of public libraries; and (5) The aesthetic beauty of the main riverside or the lakeside that grows naturally with the development of urban amenities, as distinct from any artificial beautification projects that give a lacklustre look because of poor maintenance.

There may be other candidates for inclusion in the list, but there is also no point of lengthening the list if a single indicator can represent many other hidden indicators. Notice that we have not included such indicators like the degree of air pollution or the number of pavement dwellers, since there may not be a regular pattern to match with economic development (the San Francisco area in the US may have more pavement dwellers than in

many cities in poor countries). If the visitor happens to venture into the countryside, there may be a few visible signs of development, such as the outward look of the homesteads, the availability of power supply, or the nature of agricultural implements on farming land.

A visiting economist will, however, be interested to delve deeper, possibly by staying longer in the country he is visiting. What signs will he be looking for to assess the stage of development, and the quality of governance that goes with it? The Nobel laureate economist Douglas North once noted that an economic expert arriving in a developing country should refrain from providing policy advice to the government until he has spent at least six months in that country.

A discerning economist will note how much time, trouble and speed money (that is, bribe) it takes to get even a simple thing done, like getting a permit to stay longer than originally permitted by his visa. Are things done more through personal connections or according to impersonal rules that do not discriminate between the elite and the ordinary citizens? He may be trying to assess the quality of human resources and the education system as reflected, say, in the number of expatriates in technical and managerial positions, and in the quality of the college and university graduates; do many of these educated young seek a

job abroad, which may be a sign that the education they have received has not contributed much to their employability at home, and also may indicate their lack of confidence in the country's economic future?

Are there many large-scale infrastructure projects of only "prestige value" but not well-planned to serve their purpose? Even amid a general environment of deficient governance, do there still exist at least some government agencies that are well-resourced, professionally competent and able to work out solutions and act promptly? Such dynamic agencies can potentially set examples for the work culture in other agencies, or at least can act as agents of change in their spheres of activity.

Overall, one may be looking for a system of governance in which there are vertical mechanisms for accountability of the government functionaries at each layer of administration, as well as horizontal coordination across various government agencies. The opposite extreme is perhaps an unwieldy leviathan-like governance structure in which even the well-meaning and honest actors feel alienated; although aware of the pitfalls of the system, they are unable to do anything about it on their own, like the characters in Kafka's novels.

The writer is a former professor of economics at the University of Dhaka, and is currently Chairman of the Economic Research Group, Dhaka. This is an extract from his forthcoming book *Markets, Morals and Economic Development*. The Daily Star/ANN.

100 YEARS AGO

OCCASIONAL NOTE

Judging from the Budget which has been laid before the Bihar and Orissa Legislative Council, the Reforms have not been productive of much alteration in the form or manner in which the yearly provincial financial statement is presented. The Budget still exhibits an imposing array of colossal totals, and it is gratifying to observe that, as a result of the spirited protest registered by the Local Government against the financial proposals of the Montagu-Chelmsford report, Mr. Le Mesurier is in a position to show a small surplus of current revenue over expenditure. Sir Walter Mande's statement as to the cost of general administration is interesting as giving some idea of the increased cost of the reforms. It is not surprising to find the revised estimate considerably outstripping the original one, which was Rs 15,87,000, as against Rs 19,08,000 now budgeted for. Except for the inevitable increase in the size of the Budget, and for the fact that several of the departmental heads are dealt with by the new Ministers in charge, the Bihar Budget appears to move on lines not dissimilar to those of pre-Reform days. The difference may, perhaps, be more marked when the statement comes to be discussed, and when the Legislative Council proceeds to exercise its right of modifying its provisions.

NEWS ITEMS

TRAGEDY AT RAILWAY STATION

Lahore, Feb 16
Two private soldiers of an ammunition column about to proceed as part of an escort to ammunition from Campbellpur to Rawalpindi by the evening goods train on February 14, on being placed by the Warrant Officer under arrest for concealing beer in the wagon, began firing at random from the shelter of the wagon about 8 P.M. The station staff and the few passengers about took cover, but unfortunately a passenger who was crossing the line was shot dead a few yards from the wagon. A railway menial servant was slightly injured in the head. Military aid arrived from the cantonment and the men were disarmed and confined. A British soldier got a bullet through his cap in making the arrest.

EUROPEAN HEADMASTERS CONFER

Jubbulpore, Feb 16
The First Annual Conference of Headmasters of European Schools in India was held at Jubbulpore when a representative body discussed and passed many resolutions. A Headmasters' Association was formally constituted of which Mr. W.H. Hammond, of the Cathedral High School, Bombay, was elected hon. secretary and treasurer. It was decided to represent to the Government that the central control of European education would improve the position of European schools and prevent a great deal of waste of effort, money brain power, and that inspectors should be recruited from the teaching profession. This would improve the profession and make it more attractive. It was also decided to take immediate steps to found a university college for Europeans and Anglo-Indians, which should be both residential and tutorial.

THE NEW CHURCH AT KANCHARAPARA

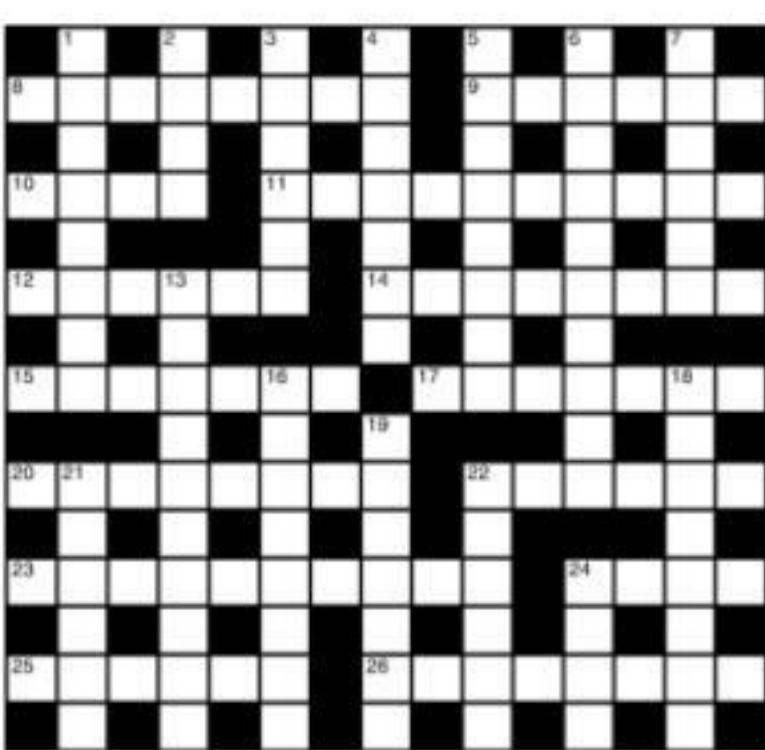
The dedication service at St. George's Church, Kancharapara, supplied a happy practical expression of the world wide desire for the unity of the churches. The Metropolitan and Dr. Watt, Principal of the Scottish Churches College, Calcutta, occupied chairs within the sanctuary during the service. The Bishop preached the sermon and took part of the actual dedication. Dr. Watt offered the Dedicatory Prayer, the Rev. K.W. Young, Secretary of the Bible Society and a Free Church Minister read the Special Litany, and the Rev. W. Wright, Scotch Church Chaplain of Barrackpore read the special lessons. The Church was built by the Engineering Department of the Eastern Bengal Railway, and the cost has been met by a grant of 26,569 from Imperial Funds and the balances from local subscriptions.

LABOUR UNREST

About 3,000 men of the Union Jute mills at Bellighata, went on strike on Tuesday. It is stated that on Monday last the men of the weaving department hurled some bobbins at Manager who had pointed out to the men that the rate of output was very slow. The men said that the material supplied to them was of inferior quality and necessarily the output was not up to the mark. The same day the men piled up bobbins in front of the Manager's quarters and on the following day the whole lot struck work. The strikers assembled yesterday morning in front of the mills' office to receive the weekly wages, which were paid. The Deputy Commissioner of Police arrived in the afternoon and posted police guards at the gate.

CROSSWORD

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YESTERDAY'S SOLUTION

LEG OVER LAMBDA
G P P D M O S
UGLI ACUTE ANGLE
A U U C E E A
ENAMEL HARD COPY
D E E H O
ASKANT SESSIONS
P M T S E N T
SOMBRIERO APATHY
O U F B E
ENOLAGAY RENOWN
R A U O E O R
DANNYLARUE BRIM
C C A K Z L S
EMERGE BENEATH

ACROSS

- Indulging in fantasies to win over party on left (13)
- Person who disses rapper? (7)
- Cause friction again with hot pants? (7)
- Part of shirt collar, perhaps (4)
- Duchess eats half of rare meat, which is a blow (6,4)
- Germany's current period of overindulgence (5)
- Clue for mystery solver on TV (6-3)
- Paying chaps to stuff when it may be lunch time (9)
- Sailors seizing princess on stage twirling bottom (5)
- Showy Kafka work keeps a chapter apart (10)

- It demands attention in extremely pompous way (4)
- Fulminating in a bad way, Republican takes lead (7)
- Nothing is mutable in these organs (7)
- Softly dancing in dressy pink clothes, they've no costumes (6-7)

DOWN

- Switch positions? I'm not sure it's available (2,5)
- Religious book very fortunate to lose its covers (4)
- A number welcoming opening of tennis courts (5)
- The euro struggles to maintain rating in this area (9)
- Hearing papal take on sex, I hold

- things together (6,4)
- Vagrant in hedge made a beastly sound (7)
- Stops doing more acid to provide impetus (4-7)
- He dispensed treatment in Post Office Boxes (11)
- Dull-witted American president's thrown outside (10)
- Decent trousers in golf, it appears (9)
- Funny bloke is something to see in Paris (7)
- Record covered by Erasure is so damn uplifting! (7)
- Fighter catches Greek priestess dressing (5)
- Inclination to put butter on starter of pancakes (4)

NOTE: Figures in parentheses denote the number of letters in the words required. (By arrangement with The Independent, London)

