THE Federal election will be

help redefine Germany for the 21st century. The political fate of Chancellor (Prime Minister)

Helmut Kohl of Christian

Democratic Union appears to

be uncertain because of a

serious challenge posed by the formidable candidate of the

opposition Social Democratic

Party (Left-Centre), Mr. Ger-

hard Schroeder. Till 10th in-

ing in the opinion polls.

Germany's Role in

Europe

bours than any country in Eu-

rope. Germany became one of

the largest and most efficient

economies in the world. After

Germany has more neigh-

held in Germany on 27

September next. It could

Election Profile

The present Chancellor Helmut Kohl has been in politi-

cal power for the last 16 years.

Mr. Kohl's greatest achieve-

ment is perceived to be the re-

unification of West and East

Germany. He has been a strong

supporter of the European

Union, one European currency

(Euro) and the Central Euro-

pean Bank. During his time

French-German relations have

been consolidated and the two

countries are best of friends in

Europe. German-Russian bilat-

eral relations have been further

strengthened and they have be-

political power, a compara-tively younger person, Gerhard

Schroeder (54), the Premier of

the state of Lower Saxony for

the last eight years, was nomi-

nated from the opposition So-cial Democratic Party which

failed three times to oust Mr.

Kohl of the Christian Demo-

cratic Union. Mr. Schroeder is

almost a generation younger

than Mr. Kohl (68). The two

men are the products of differ-

ent times and backgrounds and

accordingly their attitudes and

ideas are divergent. Mr.

Schroeder is telegenic and has

become popular these days. His

political style is comparable to

that of President Clinton or

Prime Minister Tony Blair. It

is reported that he has even

ton Adviser in 1996 to help with instant rebuttal and speedy re-

to tap the mood of the German

people by his perception that

the people in Germany are tired

Mr. Schroeder surfaced in the

Federal politics at an opportune

time when the people are pre-

pared for a change. The high

rate of unemployment and huge

costs in eastern Germany after

reunification have adversely

affected the German people. The

unemployment issue dented the

image of the present adminis-

tration under Mr. Kohl. There

is a view that Mr. Kohl was too

quick to start the process of re-

unification of Germany and as

a result the Germans, neither in

the western nor in the eastern

part are happy. The German fi-

nancial institutions are deeply

worried about Russia's eco-

nomic melt-down as they have

invested heavily in Russia.

Some appear to blame the

Chancellor for encouraging

them to pour money in Russia

The support of Euro by Mr. Kohl

appears not to be a popular

with avuncular Helmut Kohl

Mr. Schroeder has been able

hired Hank Sheinkopf, a Clin-

search on the opposition.

To dislodge Mr. Kohl from

come trusting friends.

Election in Germany: Is Chancellor Kohl's Time Up?

by Barrister Harun ur Rashid

The incoming election is a challenge for the present incumbent Mr. Kohl. There is a view that Mr. Kohl may win ... He is a political fighter and has a lot of creditable successes in Germany during his rule. He has pampered Germans with generous pensions, health care and work place conditions ... 70s, it began to play a political role in Europe. After the collapse of communism and Soviet Union, Germany has dominated the politics and economy of the European Union. However, one may not be oblivious of the fact that even after 50 years, the

stant, newspaper reports sug-gest that Mr. Schroeder is leading by between 3 and 6 per cent holocaust casts a long shadow but no single party will get a majority on their own. Chan-cellor Kohl has ruled out a on the minds of its neighbours. Germany has to take into account the fears and interests grand coalition with Social of other nations in Europe and Democrats after elections uncontinues to demonstrate as a derlining his all-or-nothing dependable and peaceful campaign strategy despite trailneighbour.

> At the 21st century, Germany has to maintain, in my view, the strategic alliance with the US through NATO. In the interests of power balance in Europe and therefore the defence capabilities of the West,

Germany cannot afford to loosen its ties with the US. After the departure of Boris Yeltsin in Russia, there is a view that a strong nationalist government may appear and the cosy relations with the West may not remain. In that event, Germany will have to play a key role to tie the nationalist Russia as much as possible to the West - a task to which many believe Germany brings more qualifications and experience than other countries of Western Europe.

President Kennedy's vision of an Atlantic community, to be supported by American and European pillars, appears to be more of a reality than it was during his time. Today the preconditions of such community exist. With Germany's strong support, the European Union (EU) has been established, the Council of Europe has proven its worth and the creation of single currency in Europe (Euro) has provided Europe with a unique political and economic weight. Furthermore, Germany together with Russia have a common interest in keeping peace in Europe and the immediate challenge is the on-going conflicts in the Balkan peninsula. However, in my view the EU lacks leadership and is therefore continuing its weak policy towards the Balkans. It is in this context the election of the Chancellor is important.

With these comments in mind, I would like to turn now to the question of incoming elections in Germany.

move while Mr. Schroeder gives an indication that he is not supportive of replacement of Deutschmark, the bench

mark currency in Europe. Mr. Schroeder is politically shrewd enough not to promise anything. His manifestos are rather vague and mean all things to all people. One of his promises is to launch a crash programme to fight joblessness among the young by bringing 100.000 unemployed young people into training programmes but the details are missing. Though he belongs to Socialist Democratic Party. there was not a single mention of socialism in his programmes. He has plenty of big ideas but nuts and bolts are

hard to find. Since Mr. Schroeder is leading in the opinion polls, the Youth Wing of the Christian Democratic Union (Mr. Kohl's party) appears to discredit him by talking about his private life. (He married four times and the third one ended in divorce only two years ago.). They produced a brochure saying that "Schroeder is a bad choice. three women couldn't be

Conclusion

If Mr. Schroeder wins the election defeating Mr. Kohl, it will be an unprecedented victory. No sitting Chancellor has been defeated by a candidate of another party since the Federal Republic was established in 1949. Mr. Schroeder will lead a country that will play a key role commensurate with its importance and its geographic position at the turn of the next century.

However, reports suggest that it is unlikely that Mr Schroeder's party will be able to gain a clear majority. He will need a coalition partner. Political observers believe that the party boss Oskar Lafontaine and not Gerhard Schroeder will exercise the real power to make an alliance with another political party to form the govern

The incoming election is a challenge for the present incumbent Mr. Kohl. There is a view that Mr. Kohl may win the election. He is a political fighter and has a lot of creditable successes in Germany during his rule. He has pampered Germans with generous pensions, health care and work place conditions. Because of high technology base, a German worker in average spends much less hours than that of any worker in Europe. He should be given credit for his achievements in Ger-

The world is watching the election in Germany with great

The writer is former Banaladesh Ambassador to the UN in Geneva.

The World Looks Unstable

by A Husnain TT T HETHER the realisation comes suddenly. or is impressed on the mind in layers year after year. there is no denying the uneasy conclusion that this decade of the 1990s is one designed by the cosmic forces (or whatever it is called) for core changes in the present civilisation now facing the cyclic degeneration. Every fall has a rise, and failures were the pillars of success, the text books tell us.

> That is as it should be — the cleansing dose has to be administered for ringing in the new century (not belling the cat) just round the corner. If that were not enough, there is a second potentially dangerous tool awaiting the new technological society - the Y2K quiz or the possible dumb acting by the computers, so far faithful. Better late than never, we all must gird up for better days ahead, simply because Hope is eternal

Looking at the world capi tals from Dhaka, there is some consolation; we are not the lone nation grappling with indecisive leadership. The Asian tigers have lost their tails, and Japan is too top-heavy to wag its own. The Koreans are chewing their tails, and the ASEAN countries are responding with "Can!" to any positive query about the future. Mahathir is supposed to have sacked his No 2, after the two central bank heads resigned. The ringgit has gone into purdah, after slimming to half its value; and is now untouchable.

Since the beginning of this year, the currencies and stock markets in several Asian countries have gone down one-third to one half. Moscow has suffered a mammoth heart attack. and a new prime minister is difficult to find. The Pak rupee has slipped from rupees 40 to 60 per dollar; and the Indian rupee is chasing to catch up with the Bangladeshi taka. The Aussie dollar is taking kangaroo leaps backwards; and NZ is in a soup of milk and raw meat.

The Asian immigrant issue is hotting up the ensuing Australian elections. The world's largest enclosed area, the HK International airport, is suffering from glitches due to premature opening; and 30 Tomahawk missiles are missing after the

countdown at the delivered sites (Afghanistan and Sudan).

View from Dhaka

While the Japanese market has become a black hole (according to a financial analyst on the BBC), a North Korean test missile went astray to scare the troubled Japanese. The super floods in China matched the size of the vast country; while tiny Bangladesh, with the highest density of population in the world, is not lagging behind - one-third of the country is said to be under water; some areas for more than 50 days.

The price of gold and confidence in the noble metal have crashed, and South Africa is finding it difficult to lure money even with diamonds. Up in the sub-Himalayas, too many trees have been cut, loosening too much soil resulting in too many landslides - pushing the silt into Bangladesh delta. Congo has gone bongo, but without any rhythm. Sudan and Afghanistan are smarting from a taste of the Monica missiles (a million dollars each). an airy gift from Uncle Sam, who has a smarter nephew by the name of Clinton. Iran has deployed 70,000 old-style cavalry for exercises due East, and the Kabiliwallas are not at all

In Bangladesh, by the grace of the higher ups, mortal and otherwise, the problems are more marginal, like a little bit of erosion (rivers and banks), a little overflow of waters here and there (thanks, no drought); and pouty displays of abhiman between kith and kin. Our systems loss is a boon to many.

Our law is low, and order is controlled by those outside the periphery of law and order perhaps there is too much of democracy, as we have too much of the famed Bengalee sweets. The higher education has evaporated into thin air, and Dhaka city is thick with the exhaust fumes.

The Opposition is in the wilderness, as the Parliament building was provided with holes (triangles and circles) by the famed architect Kahn; whose foresight is now being appreciated.

My best friend is rather philosophical: "It could have been worse".

Social Democrats Set to Oust Long-serving German Leader?

THE German elections of 27 September could mean the end of 16 uninterrupted vears in government for Chancellor Helmut Kohl. In 1982, the Free Democrats ended their government coalition with the Social Democrats preferring an alliance with Kohl's Christian Democrats instead. Since then, Kohl has won four national elections but this time could be successfully challenged. The Social Democrats and their candidate Gerhard Schroder premier of the state of Lower Saxony, are leading all opinion polls. With the help of a minor party, the Alliance 90-Greens, they could

obtain a majority in Parliament It is still too early to write off the experienced and tenacious Kohl perhaps capable of swaying the sixth of the electorate still undecided. Nevertheless, the era Kohl is probably coming to an end. His greatest achievements were the management of German unification in 1990 and his leading role, together with the late French president Mitterand, in advancing European unification. His crucial problem, on the other

hand, is the economy. In late 1989, the collapse of Communist East Germany came as a surprise to Kohl but he quickly grasped the opportunity. He guided very deciDr Oswald writes from Germany

Voters no longer believe that Kohl has the policies to reduce the number of over four million unemployed. Schroder has more credibility in this area because he is a member of the company board of car producer Volkswagan ...

sively the process which absorbed the German Democratic Republic into the larger Federal Republic of Germany. Economic unification came when East Germany adopted the West German currency on 1 July 1990. Political unity followed on 3 October 1990 when the German Democratic Republic ceased to exist.

Kohl's role during unification carried him to electoral victory in late 1990. Especially East Germans expressed their enthusiasm for unification in a vote for the CDU. Without unification, the era Kohl might have ended earlier because economic problems had dented his popularity in West Germany in 1989.

Kohl's other historic achievement is the advance of European integration in the 1990s. He dismissed the 'Mitteleuropa'-option promoted by nationalists who wanted to shape a German sphere of influence in Central and Eastern Europe while loosening the ties to France, Britain and the USA. Kohl, however, opted to con-

tinue European integration. The Maastricht Treaty of 1991 and the single European currency are the answer of Chancellor Kohl and President Mitterand to German unification.

A united and more powerful Germany had to be restrained and tied into a stronger European framework. Before the end of his political career, Kohl wanted to make European integration irreversible in order to make European wars as in 1914-18 and 1939-45 impossible in the future.

Kohl's weakness is the economic situation. Germany is still the leading economic power in Europe and a strong competitor of the United States and Japan in international trade. Yet the economy is affected by global competition and by the costs of German unification.

In the short term, unification was a political success. In the medium term, however, deep disappointment set in when East German regions lost half of their industrial capacity

A Rapid Appraisal of Crop Damage

and Prospect of Aman

by K M Nabiul Islam

Total damage of Aman at the national level is estimated as 20.69 lakh metric tons. In this calculation, losses in

local variety of Aman have not been taken into consideration. Normal yield of Aman at the national level is

taken as 96 lakh metric tons.

in the first four years after unification. Unemployment rates in the East still range from 15 to 20 per cent whereas 7-12 per cent in West German regions are not too impressive either.

Kohl's challenger and likely successor, Gerhard Schroder, has promised continuity in German foreign policy. He also supports the introduction in 1999 of the Euro, the single currency for eleven European countries. For many Germans there are, however, two main differences between Kohl and Schroder.

Voters do longer believe that Kohl has the policies to reduce the number of over four million unemployed. Schroder has more credibility in this area because he is a member of the company board of car producer Volkswagan part, owned by the state government of Lower Saxony. The other difference is that many voters are simply tired of Kohl after 16 years. Kohl's historic role regarding German unification and European integration is enormous but September 27 could be the end of the Kohl era.

 Probe News Agency The writer is a German political scientist working as a Senior Lecturer at Curtin University of Technology in Perth, Australia. Currently he is visiting Berlin and Stuttgart in his home country.

World Ozone Day

Save the Endangered Earth

by Mohammod Aktarul Islam Chowdhury and Md Rezaul Kabir Chowdhury (Robin)

severest environmental phobia.

element located in the incoming ultra violet (UV) plants. It filters all radiation below 3000 A° which is bio-

logically harmful and thus is controlling the thermal budget being decreased by chloroflurocarbons (CFC), often commercially known as freon (a group of nontoxic, nonflammable and

chiefly produced chemicals). Formation of Ozone Layer: tric oxides and atomic oxygen. This atomic oxygen reacts with atmospheric molecular oxygen to form ozone. Thus ozone layer in the atmosphere that is stratosphere is formed which

acts as a life protecting shield

nitrogen oxides by supersonic transport (SSTs) flying above the tropopaus (uppermost level of troposphere), increased use of nitrogenous fertilizers and the formation of atomic chlorine from chloro-fluromethanes

(CFMs) released in the troposphere for insulating houses. keeping coffee and hamburgers warm and to prevent the damage of eggs and shipped items. These are inert in normal chemical and physical reaction; but these inert gaseous compounds are accumulated in greater amounts at stratosphere and release atomic chlorine (CI) in the stratosphere under the action of short wave UV-radiation. Each atom of chlorine then reacts with more than 1,00,000 molecules of ozone to form oxygen. Thus the chlorine atom released from CFMs destroy the ozone layer without loss of reactants. Observed Intensity of Ozone Layer Depletion: Severe ozone layer depletion can be observed using theoretical models of chemical reactions taking place in the stratosphere. The general consensus, based on theoretical models of chemical reactions taking place in the stratosphere, is that continuing CFC

emissions at 1987 levels will reduce average levels of ozone in the stratosphere by 3 to 5 per cent over the next 100 years, although the US National Aeronautics and Space Administration (NASA) projects a 10 per cent depletion of the ozone layer by 2050. A gradual decrease already believed to be taking place cannot be established by direct measurements because average ozone concentration can fluctuate by 2 to 4 per cent from year to year due to variations in solar radiation and large scale volcanic eruptions. Ozone depletion may be occurring more rapidly and more extensively than the projections of NASA. Satellite image have revealed that each Autumn since 1983, "a hole" that is a thinning in the ozone layer has appeared in the stratosphere over the South Pole; the hole, covering an area of the size of the United States, contains 40 per cent less ozone

than normal. A smaller hole has been observed over the North Pole. It is not known whether this loss of ozone during this September-October part of each year is caused by CFCs, large volcanic eruptions such as Mexico's El Chinchonal in

1982, natural climatic processes such as cyclic changes in solar radiation or some combination of these related factors. Effects of Ozone Layer Depletion: Depletion of ozone layer in stratosphere allowed penetration of excess UV radiation on the earth surface which obviously increases the temperature of the earth surface that will have a tremendous impact on the global climate. The ozone depleting air pollu-

tion also causes temperature to rise around the world which increases melting of polar ice caps, flooding of coastal regions and sea level rise. According to the climatologists, Fiji, Western Samoa, Hawaii, parts of Malaysia and Indonesia, Maldives, Mauritius, Diego Garsia, southern part of Bangladesh will go under water very soon. Particularly, six greater districts Khulna, Patuakhali, Barisal, Faridpur, Noakhali and Comilla and coastal islands Bhola, Hatiya, Ramgati, Sandwip, Kutubdia, Maheshkhali, St. Martin etc. will be engulfed by the Bay of Bengal, according to ozone specialists of the world. The increased UVradiation causes about 30 per cent increase in non-fatal skin cancers and some other diseases. The Environmental Protection Agency (EPA) estimates that a 5 per cent ozone depletion would cause an additional 940,000 cases annually of Nonmelanoma Skin Cancer and 30,000 more cases annually of often fatal Melanoma Skin Cancer. In addition, humans would be subject to increase eye cataracts, severe sun burn and suppression of the immune system. There would also be a 10 per cent increase in eyeburning photo-chemical smog. Plants' production is decreasing because photosynthesis is mostly affected by increasing of UV-radiation and as a result greenhouse-effect is also increasing. Consequently, food chain between plants, man, animals, micro and macro organisms is destroyed. Leading to the eventual disruption of the eco-system. On the other hand, ozone layer depletion also cre-

ates a great problems on aquatic environment; various micro and macro organisms production is decreased by excess UV-radiation.

Ozone Layer Depleting Pollutants Used in Bangladesh: In Bangladesh some compounds of fluoro carbon such as CFC-12, CFC-11. HCFC-22, are commonly used in refrigeration, aerosol, foam production, air conditioning etc. which are destroying the ozone layer because they contain atomic chlorine (CI). Also methyl chloroform. carbon tetra chloride, methyl bromide, halon etc. are widely used in many sources which in turn destroy the ozone layer. Such pollutants aggravate the risk on climate which already has been endangered by severe ozone layer depleting pollutants used in many mines and chemical industries and such acts as fatal nuclear explosions made by our mighty neighbour India and Pakistan.

Conclusion: Now-a-days,

ozone layer depletion is becoming an international environmental threat. It occurs greatly in industrialised areas and metropolitan cities of developed countries of Europe and USA where regularly tonnes of ozone layer depleting pollutants specially CFCs are produced by human activities. Third world countries like Bangladesh is also not safe from the havoc of ozone layer depletion. To reduce ozone layer depletion, CFCs, the primary offender can be controlled by an International Agreement between the major CFC producers and users such as the US, the Russian Federation, the Scandinavian and West European countries. CFCs are not necessary for the functioning of the society and substitutes are available. We can use some gases such as HFC-134A, HCFC-123, HCFC-124, HCFC-142B which are not harmful for the ozone layer instead of CFCs. We can also use HCFC-23, HCFC-125, and water instead of Halon, HCFC-225 water and hydrocarbon instead of Methyl chloroform and carbon tetra chloride.

All efforts should be taken to protect ozone layer depletion so that our planet can be saved from the severest environmental phobia. If we become able to ensure to save the world from the threats of ozone layer depletion, then only the observance of World Ozone Day will

be a success.

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quick field trip was made during 1-2 September, ▲ 1998 by a research team of Food Management Research Support Project (FMRSP) under the Institute of Food Policy Research Institute (IFPRI) and BIDS, Dhaka. The objective of the investigation was to get a preliminary and first-hand impression of the nature and extent of damages caused to crops due to the current devastating flood. The recovery mechanism in respect of replanting of Aman was also investigated to some extent. Both flooded and non-flooded areas were covered.

We quickly visited eight thanas: Sherpur, Bogra Sadar, Sariakandi Dhunat and Ka-halu of Bogra district; Ranipukur and Noagaon Sadar of Noagaon district; Raiganj of Sirajganj district. All of these thanas except Bogra Sadar and Kahalu are severely affected by floods. In fact, it was almost impossible at this stage to formally interview farmers in the flooded areas as they appeared to be extremely distressed. Hence, the conclusions made were based on informal discussions through a short checklist and some observations. For the same reason, the conclusions on Aman prospect are tentative. The findings are outlined be-

Depth and Duration of Inundation: Most of those we met in the affected regions have flooding in their homesteads. The average depth of flooding is 1.0 ft in their homesteads and 3.0 ft in agricultural fields. The duration of flooding varies from 25 to 60 days depending on the locations. Water has just started receding, but extremely slowly. It is expected that flood will recede in 15 days time now. However, some observed that flood water will not completely recede until the end of this month. The average depth and duration in the 1988 flood, as they recalled, was about 2 ft and 10 days at their homesteads. Most of the respondents observed that they have never experienced flood (1998) of such a long duration.

Extent of crop Damage and **Recovery:** Two major crops are Boro (as they call, IRRI-Boro) and Aman, with very small acreage under Aus.

It became evident that the Aman losses have been colossal. We observed almost no plots with any plants in the affected low-lying fields. Most of

the fields were observed to be under water. Some higher lands have plants partially damaged. Only a few could replant only in higher lands. However, those who have been able to replant in higher lands are expecting a normal harvest. The farmers of unaffected lands may reap a better-than-normal yield due to general moisture recharge of the soil

Severe most damages were caused to Aman seedlings and seedbed due to floods that took place several times. Almost 60 per cent of farmers have lost seedlings completely and 40 per cent partially. Those who grew Broadcast Aman in low-lying areas have lost the plants completely. Even if water recedes in 15 days, it will be too late for the HYV Aman to plant again. More importantly, there is a serious shortage seeds/seedlings. In some places, seeds are smuggled in from In-

dia but at a very high price. Aus has suffered minimum losses as most fields were harvested before the floods came

It is estimated that about 80 per cent of the standing Aman plants in the flood affected fields are totally damaged, and about 20 per cent partially damaged. Of this partially affected crop 30 per cent will have one-third of normal yield and 70 per cent one-fifth of normal

As regards recovery, if water recedes in 15 days time, Aman local variety can be grown in some lands, although some said it would require another 15 days to get the land dry and suitable before broadcast Aman/Rabi crops can be grown, when it will be too late. Some farmers are planning to grow mustard seeds after the water is receded. It is also possible to grow wheat but few seemed to be actually keen as in that case they would have to forego Boro for wheat. Because, Boro and wheat cannot be grown in one

It is estimated that, in all. 10 per cent of the totally damaged Aman area will be replanted by HYV variety, and 5 per cent by local variety provided that necessary seeds are made available timely. The yield from local variety is estimated to be 40 per cent that of HYV. Additional yield of Aman over normal yield in the unaffected locations is estimated to be 10 per cent of usual harvest. Farmers

reported that they have harvested additional yield of Boro this year to the extent of 2.5 per

Loss to Other Crops: Jute is not considerably damaged but the quality has deteriorated somewhat, as the growth was hampered due to stagnated water at the roots. However, the processing of raw jute has been facilitated by flood water. Sugarcane, a major cash crop of the season, is the only crop visible in a few fields, which has been partially damaged. In most cases, an early harvest was inevitable. Most longer plants. however, withstood the flood.

Loss to Agricultural Assets: Due to long flood-to-peak level losses to livestock appeared to be minimum as they were moved to safer places. For the same reason, little of the existing stock of seeds or food have

Current Stock of Food: Most farmers interviewed reported that they have sold Boro paddy keeping some stock for the future. Small farmers have sold largely to markets and larger ones to both markets and government godowns. About 80 per cent of farmers reported that they have some carry-over from this year's Boro harvest.

On an average, stock of 3 to 5 mds of rice is kept by small and marginal farmers, and of 5 to 8 mds by medium farmers. The large farmers are reported to have at least 10 mds of rice as stock. The farmers, by and large, are of the opinion that they have the rice stock for consumption up to November (Kartik). Agricultural labourers have no work nor they have any stock of food. The situation will worsen in the coming months.

Some farmers expressed caution that India may stop export of rice through both formal and non-formal channels as some of the states there have also been flooded. Apart from that, some recent political reasons have also cropped up. As paddy seedlings have been washed away there will be serious shortage of seeds and seedlings in coming days. Seeds are now coming in from India but against a higher price. Knowledgable sources suggest that private firms should come forward in the marketing of seeds in Bangladesh, and policy directions from the government towards this end are needed. Serious shortage of vegetables is apprehended in the coming

months.

Price of Rice: Just before flood, the retail price of coarse rice was estimated as Tk 11 12/Kg and the current retail price varies in the range of Tk 14-15/Kg. The average retail price of coarse rice is expected to rise in a short time, estimated to be about Tk 18-20/Kg.

National Damage in Aman Production: Some Tentative **Figures**

Based on the above findings, which are the result of only a few hours' investigation, our guestimate of the national Aman damage is outlined be-

About 33 per cent of total Aman acreage have been affected by floods at the national level. This is a preliminary estimate on the basis of the current field visit to flooded and non-flooded regions in eight thanas. In this context, it may be mentioned that a vast proportion of low-lying lands (e.g. Beels, Haors) which are presently under water are not cultivated any way, let alone to be under Aman crop. Besides, Aman crops in many districts of southern and northern regions are relatively less af-

Total damage of Aman at the national level is estimated as 20.69 lakh metric tons. In this calculation, losses in local variety of Aman have not been taken into consideration. Normal yield of Aman at the national level is taken as 96 lakh metric tons.

The estimate of Aman damage (20.69 lakh tons) is made on 2 September, based on the major assumption that one-third of total Aman acreage have been affected at the national level and flood water will completely recede by 15 September. Given the situation as of 5 September, the above assumption may prove unrealistic. In the changed aggravating situation, and on the assumption of total Aman acreage affected as 40 per cent and the flood water not completely receding until the end of this month, the total Aman damage may be estimated as in the range of 27 lakh

The ultimate extent of damages now depend on how quickly and effectively the government and other agencies can respond to tackle the crisis arising out of the unprecedented long-duration flood.

tons.

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ZONE is one of the most important autotropic All efforts should be taken to protect ozone layer depletion so that our planet can be saved from the

international periodic table. It is a natural constituent of stratosphere (extended for about 50km above the surface of the earth) where it is formed and destroyed by the chemical cyclical process with sunlight as a driving force. This ozone forms a well marked layer called ozonosphere within the stratosphere. The stratospheric ozone layer is able to filter the radiation which is very harmful to our environment; it acts as a pollutant that causes damage to animal lungs and

of the earth. However the standard amount of ozone in the atmosphere is therefore intimately connected with the life-sustaining process and any depletion of ozone content will exert catastrophic influence on our biotic environment. Thus in the stratosphere, ozone protects life on earth by screening out more than 99 per cent of the sun's harmful ultraviolet radiation. Many scientists are concerned that the average concentration of ozone in the stratosphere is

Normally ozone has been present in the atmosphere at about 0.5 ppm at sea level. However it shows a remarkable variation from an average of about 0.02 ppm in winter to about 0.07 ppm in summer. Ozone is formed as a consequence of the interaction of radiation with oxygen to give atomic oxygen (o). The sufficient quantities of ozone present in our atmosphere are formed by the action of UV-radiation on nitrogen oxide. Any combustion process, especially automobiles, daily emits tonnes of nitrogen oxides and hydrocarbon. Heat from any source may make atmospheric nitrogen and oxygen to react into nitrogen oxides. The hotter sources produce greater nitric oxides. Nitric oxides gets oxidized to nitrogen dioxides by atmospheric oxygen but energy from sunlight quickly splits nitrogen dioxides back into ni-

against the sun's ultraviolet Causes of Ozone Layer Depletion: Three major areas where human activity can directly influence the ozone cycle have been the direct emission of