Historic March

March 15, 1971

Student Leaders Address Massive Rally at Baitul Mukarram

People Urged Not to Sell a Chatak of Anything to the Enemy

ON THE 14th day of the Non-cooperation movement launched by Sheikh Mujibur Rahman, the Swadhin Bangladesh Kendrio Chattra Sangram Parishad (Independent Bangladesh Central Students Action Committee or IBCSAC) held a big rally at the Baitul Mukarram to protest the issuance of MLO No. 115.

Presided over by Mr Nur-e-Alam Siddiqi, President of the Chhatra League the rally was addressed by Messrs A S M Abdur Rab, Abdul Quddus Makhan and Shajahan Siraj, members of the Swadhin Bangladesh Kendrio Chhatra Sangram Parishad.

Speaking at the rally Mr A S M Abdur Rab urged the people not to sell any commodity to their enemies. He cautioned those who were still supplying daily necessities to the enemies of the people of Bangladesh.

Mr Rab in his speech said that the struggle for the freedom and emancipation of the Bengalees would continue till the goal was achieved. As the struggle might take a long time it was the duty of all to maintain normal activities of daily life, he added.

Sounding a note of warning to the anti-social element Mr Rab asked the volunteers who have been engaged to maintain law and order in different mahallas of Dacca city and elsewhere in Bangladesh, not to take any strangers into confidence who might be eager to help them. In this connection he observed that some undesirable elements were collecting funds from the citizens in the name of Sangram Parishad. They should be resisted by all means, he said.

Emphasising the need for discipline Mr Rab appealed to the Bengalee defence personnel now in Bangladesh not to proceed for West Pakistan.

He pointed out that the the people of Bangladesh would bring to an end all sorts of exploitation under the leadership of Sheikh Mujib. They would not allow the birth of another fortunate 22 families on this sacred soil.

Mr Nur-e-Alam Siddiqi in his speech said that there might be bloodbath in Bangladesh, but no power in the world could prevent the people from achieving their freedom. He urged the people to remain united and carry forward the struggle.

Mr Siddiqi warned those who were engaged in playing with fire. Referring to MLO 115 he said that they had issued their order "and we have issued our own". The whole administration now obeyed Sheikh Mujibur Rahman.

He said that they would not give a chhatak of daily necessities to the enemies of people. Mr Siddiqi asked the audience to raise their hands keeping Baitul Mukarram Mosque as the witness not to supply any commodity to the people's enemy. The big gathering did so.

Giving a stern warning to those who were trying to create disturbance Mr Siddiqi said that such people would be severely death with.

"We have set up a court at Iqbal Hall to try anti-social elements", he added. "As the responsibility of maintaining law and order is with us, we will show the people's enemy that there is no anarchy, looting and hooliganism in Bangladesh," Mr Siddiqi asserted. He requested all to report criminal incidents that might occur to Iqbal Hall.

As regards an alleged move to transfer some Bengalee officers to West Pakistan, Mr Siddiqui said that it must not be done.

Referring to policemen, Mr Siddiqi said that once they were used to repress the people of Bangladesh, but now they were with us.

Mr Abdul Quddus Makhan, General Secretary, DUCSU said that 14 days of great struggle for freedom of Bangladesh had passed. People of all walks of life have given unqualified support to the fight, he added. Addressing the rally Mr Shahjahan Siraj, General Sec of the CL urged President Yahya to transfer military personnel to West Pakistan. — *The Pakistan Observer* March 16, 1971

Out of the classes and into the streets: Students pouring out of the campus on March 1, under the banner of the Central Students Action Committee. Later the same day, the words "Independent Bangladesh" were added to the banner.

Media Flashback

Compiled by **Iftekhar Ahmed Chowdhury, Ekram Kabir** *and* **Dipak Kumar Karmakar.**

Yahya Arrives In Dacca

PRESIDENT General Yahya Khan arrived in Dacca from Karachi on Monday for talks with Awami League chief Sheikh Mujibur Rahman. Contrary to the usual practice, the President did not give any interview to the waiting newsmen at the airport where heavy security measures were taken. The President's motorcade from the airport to the President's house (now President Bhaban in Bengali) was escorted by armymen.

Stand Supported

AN emergent meeting of the Working Committee of Pabna Samity at Dacca held on Monday extended its full support to the stand of Sheikh Mujibur Rahman made at Race Course Maidan on March 7. The meeting was presided over by Mrs Anwara Begum.

The meeting in a resolution also expressed its deep sympathies for the bereaved families of those killed in the movement.

Civilian Defence Staff Defy MLO 115

CIVILIAN employees drawing wages from the national defence sector continued to stay off duty yesterday (Monday). By the enforcement of a special martial law order (Martial Law Order 115), these employees were ordered to resume work from yesterday. But instead, they brought out a procession yesterday in favour of the movement in Bengal. The processionists demonstrated at various points of the city against the Pakistani oppression and declared their wholehearted support for the people's liberation. — *The Sangbad*, March 16, 1971

Impersonators Warned

AWAMI League Voluntary Force chief Abdur Razzaque said in a statement yesterday (Monday) that some anti-social elements in the guise of Awami League volunteers are trying to achieve undue privilege from common people and are continually posing threat to the liberation movement of the masses.

In the statement Razzaque called on the people to identify these miscreants and hand them over to the Awami League office or inform of their whereabouts to the Awami League office over telephone No. 252178. — *The Sangbad*, March 16, 1971

Essential Commodities Available

CHITTAGONG, March 14 : President of the Chittagong Chamber of Commerce and Industry, and the newly-elected National Assembly member Mr Idris today in a joint statement confirmed that there is not much to worry about essential commodities, such as foodgrains, edible oil, kerosene, sugar, salt and medicine as they are in abundant supply here.

They asked people not to be alarmed at the scarcity of essential items, reports ENA.

If the vested quarters, added the statement, try to sabotage the supply of these daily necessities, it shall be readily informed to the Chamber office or the Awami League secretariat. Mr Idris warned that hoarding of the essential commodities by any interested quarter shall be severely dealt with. — *The Ittefaq*, March 16, 1971

Checkposts Withdrawn

Four leaders of the Independent Bangladesh Central Students Action Committee (IBCSAC), Nur-e-Alam Siddiqui, Shahjahan Siraj, A S M Abdur Rab and Abdul Quddus Makhan, said in a statement yesterday :

"We have decided to withdraw all checkposts which were set up at various points of Dhaka city last Monday. The checkposts were set up to realise Bangabandhu Sheikh Mujibur Rahman's instructions to stop smuggling of money and property from Bangladesh. But, because of the inconvenience caused to the people's day-to-day life, we are issuing instructions for the withdrawal of these checkposts." The statement asked people to remain alert against any attempt to smuggle money out of the country.

The statement continued, "We have also come to learn that some armed miscreants, travelling in cars, are still raiding people's houses and extorting money by taking advantage of the current movement. We are calling on the freedom-loving people to capture those miscreants and cars, and hand them over to the police." — *The Ittefaq*, March 16, 1971

Women's Action Committee at Noakhali

Noakhali, March 15: A Women's Sangram Parishad (Action Committee) was formed in a meeting of the ladies of Noakhali town held on March 13 at the local town hall under the auspices of the women's branch of Noakhali District Awami League with Mrs Nurunnessa Begum in the chair. The meeting was addressed among others by Mrs Arjumand Banu (Ruby), Lady Sec Noakhali District AL, Mrs Sobhan, Mrs Ahsanullah, Mrs Ashraf Jahan, Mrs Nurjahan Amin, Miss Shirin Jahan and Haidari Sultana.

Mr Nurul Huq MNA, Mr Shahiduddin Iskander MPA, Secy and Organising Secy respectively of Noakhali Dist AL, Kazi Mahfizul Huq, Mr Abu Taher, Editor, Weekly Jay Bangla and Mr Ahsanullah also attended the meeting.

Mrs Arjumand Banu (Ruby) and Mrs Nurunnessa Begum were elected convener and joint convener respectively. The meeting demanded immediate transfer of power to the elected representatives of the people and acceptance of four-point demand of Sheikh Mujibur Rahman. — *The Pakistan Observer* March 16, 1971

Radio Takes Stand

YESTERDAY (Monday), in a combined meeting held by different departments of Bangladesh Radio dealing with programmes, technology, the administrative officers and their own artists, complete and active support was expressed for the non-violent and non-cooperation movements initiated by Bangabandhu Sheikh Mujibur Rahman.

Gratitude was expressed for the way the regional director, news editor, regional chief engineer, are guiding the workers from 2nd March in order to strengthen the determination of the people, and also for the way, people are welcoming Radio programmes including newspapers. All of them took oath to work together in order to prosecute the non-cooperation movement successfully.

All the employees of Dhaka Radio Centre, in one proposal, decided to give their salary of one day to Awami League charity fund. — *The Ittefaq*, March 16, 1971

Feature — Science and Technology

Biotechnology Threatens World's Hunger Problem

by Geoff Tansey

NGO members from over a dozen European countries met in Barcelona to discuss genetic resources and biotechnology. The 70 participants represented farmers, consumers, researchers, environmental groups and Third World development project agencies.

Biotechnology allows scientists to manipulate animals and plants by taking genes for a particular characteristic — for example in plants, drought tolerance, resistance to a certain pest or pesticide — and transferring them to another plant, not necessarily in the same species.

The danger comes from the way the technology is being controlled and the kinds of development that are being undertaken, believes Henk Hobbelink of Genetic Resources Action International (GRAIN), author of a recent book of the subject. "Most biotechnology research is being done by or for the benefit of large multinational companies in the industrialised countries who have already bought up most of the small seed companies following the introduction of Plant Breeders Rights and are now pressing for patent legislation to be extended to living organisms so they may control the technology.

Some developing countries could find their products no longer needed as companies develop substitutes that can be factory produced, for example vanilla and cocoa butter substitutes. Farmers could find themselves having to pay for seed they have grown and want to plant next year if it contains a gene put in by a company, or locked into using pesticide-tolerant plants which tie them to particular chemical treatments, he believes.

Genetic erosion and present trends in biotechnology will increase the vulnerability of food supplies, hurt the world's poor and many not solve hunger, in the view of some 50 European non-governmental organisations (NGOs).

The meeting urged that 'need' is adopted in any developments in this field, with 'need' broadly defined in relation to the environment and society as a whole, including poor farmers, not simply the rich or the balance sheets of large companies.

The push for patent protection — originally designed for industrial products — into living organisms is promoting even further the privatisation of a common asset of humankind which has been freely shared. In developing new varieties, the plants used as sources of genes have often been developed by small farmers in developing countries who get no reward or grow wild in developing countries and are part of their natural heritage.

Participants feared control of the basic requirements for food production was moving into the hands of large companies from the industrialised countries. What was needed was for biotechnology research geared to reducing input requirements and enhancing genetic diversity.

Too much public research money is benefiting private companies while other types of research that would help many more of today's poor farmers were neglected, believes Henk Hobbelink.

'Simple mass selection to improve local varieties is one example of under-supported research,' he says. 'Work on enhancing multiple cropping and rotation techniques, rationalisation of the use of wild plants in local diets and the upgrading of traditional crop protection practices, are just a few others.'

The meeting called for a halt to any further moves to patent biological processes until after the 'Earth Summit' in June 1992 which is due to produce a global convention for the conservation and utilisation of biological diversity. Local communities should have rights over the local biological resources vital to their livelihoods and farmers have a right to use and resow their own seed, believe the participants.

In developing countries the great number of varieties developed by small farmers at village level over thousands of year of farmer-based plant and animal development, are being swept by the flood of uniform plant varieties and animal breeds to emerge from modern, industrial agriculture.

Although high-tech national gene banks have been set up with help from the Rome-based International Board for Plant Genetic Resources (IBPGR), they are basically large cold stores for seeds.

But seeds need to be stored very carefully, their characteristics and type of growing conditions logged, and seed must be re-grown every so often to keep it viable.

They are necessary as a last resort but they are not enough, Rudiger Stegemann of African Seeds of Survival told the meeting. Gene banks put all their eggs in one basket. The careful re-growing of seed to maintain its viability can be difficult even in rich countries. Only 28% of the seeds tested in the USA's central gene bank at Fort Collins were healthy, with the rest of the collection having either too few seeds to be tested (45%), dead or dying (8%) or not tested for five year (19%), according to Henk Hobbelink.

Seed from the many varieties must also be preserved, produced and improved in farmers' fields, says Stegemann. This keeps the variety alive and allows it to be developed further by farmer.

Now the IBPGR is taking notice and developing a new strategy which will include this kind of work by small farmers. After decades of relative hostility between the NGOs and the Board they are set to discuss ways of developing a farmer-based approach as part of their genetic resources protection strategy. — Third World Network Features/International Agricultural Development.

(Geoff Tansey is a journalist who wrote this article for International Agricultural Development, with whose permission this feature is reprinted).

Science Brief

Pilot Reactor with Heating/Cooling Systems

A fully automatic pilot reactor with cooling and electrical heating systems intended to improve process control in the chemicals, paints, lubricants and pharmaceutical industries has been developed in France, reports *French Technology Survey*.

The UNICEL pilot reactor developed jointly by Cellier and EDF Industrie is built of 316 Ti stainless steel, has a double wall containing baffles and a capacity of 150 litres. The unit can operate between minus minus 30 degrees to 300 degrees celsius either under vacuum or at a pressure of upto 10 bar.

The system consists of two main circuits: the heat transfer circuit provides heating or cooling to the jacket surrounding the reactor, and a closed cooling circuit which produces the low temperatures necessary for cooling the heat transfer medium.

The electrical heating system involves a double flow heat exchanger and is fitted with high flux heaters rated at 33 kW. With a single fluid circulating in a closed loop through the double wall, the UNICEL system offers several advantages.

Among these are the absence of corrosion, purging, mixing or product loss. Also thermal shock occurs only in the double flow exchanger and not in the reactor, the thermal inertia is reduced by the low volume of the heat transfer fluid loop and the precision of the electrical heating system allows fine control, the journal said.

Approaching Controlled Nuclear Fusion

by Roif H Simen

ANOTHER major step towards controlled nuclear fusion has now been taken in the Federal Republic of Germany with the development of a technique for coating the inner walls of fusion reactors with a protective layer containing boron. With the help of this technique, considerable progress has been made in the USA's second largest fusion experiment, the Tokamak DIII-D, which is being conducted by *General Atomics* in San Diego, California. Not only has the containment time of the hydrogen plasma inside reactors been nearly doubled and its temperature raised by 20 per cent to 60 million degrees Celsius, it has also become possible to effectively protect the plasma from contamination.

This achievement is also an indication of the international advances made in attempting to simulate inside reactors the process whereby energy is released inside stars: the large-scale fusion of two hydrogen nuclei each into one helium nucleus which, as the "product", is lighter than its two original components and whose superfluous mass is radiated in the form of energy, as dictated by the laws of physics.

"However, in order for this reaction to take place "outside" stars, the hydrogen must first be transformed into a state corresponding to stellar conditions, in which it exists in bare form as pure nuclei travelling at such a high velocity that they are able to overcome the repulsive forces generated by their positive electric nuclear charges.

Only in this condition can they collide to achieve the desired process of fusion. For this, the hydrogen must be converted into plasma, an electrically charged gas with a relatively high density, heated to a temperature of roughly 100 million degrees Celsius.

However, no reactor vessel is, capable of containing this kind of superheated nuclear incendiary, even for a very short period of time. Thus researchers not only have to keep such plasmas suspended in a vacuum using powerful magnetic fields, but they also have to render them explosive — an extremely difficult and challenging task.

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A crucial role is also played by the interaction of the plasma with the walls of the reactor. Although they do not come into contact with the plasma, they are irradiated by individual particles of it, which are lost in the process. Even the slightest contamination of this sort could either prevent, or at least extinguish the plasma "blaze."

Researchers at the Forschungszentrum Julich (Research Centre Julich) have for years been focussing on such plasma-wall interactions as part of an extensive research program involving a large instrument named TEXTOR; a Tokamak-type experimental reactor developed originally by Soviet perimental installation can accommodate plasma rings one meter thick with an outer diameter of up to 3.5 meters. At present, it is capable of holding the plasma in place with an accuracy of just a few millimetres for more than four seconds at a temperature of 25 million degrees Celsius.

This process is also used to develop further effective techniques of heating plasma, as well as methods of harnessing it magnetically and keeping it pure. This not only entails largely suppressing interaction with the walls but also removing unavoidable and unwanted reaction products from the combustion area.

The new protective coating in this instrument was developed by a Swiss-German re-Agency) in Vienna.

TEXTOR is part of the joint fusion research program launched several decades ago by the European Community, Sweden and Switzerland, which has since led to the most efficient fusion experiment worldwide, the Joint European Tours (JET), located in Culham, near Oxford, England.

Major German participants in this project include the Max-l nck-Institut Fur Plasmaphysik, IPP, (Max Planck Institute for Plasma Physics) in Garching, near Munich and the Kernforschungszentrum Karlsruhe KFK (Nuclear Research Centre Karlsruhe).

The focus is now on JET's successor, the International Thermonuclear Experimental Reactor (ITER), and the European Community plans to enter discussions on its scientific and technical requirements with its partner nations Switzerland and Sweden, as well as Japan, the United States and the Soviet Union.

(German Research Service)

researchers.

However, in Julich this reactor will be not used for igniting "real" fusion blazes, but only for investigating the behaviour of superheated hydrogen plasma. The ring-shaped containment vessel of this experimental installation can accommodate plasma rings one meter thick with an outer diameter of up to 3.5 meters. At present, it is capable of holding the plasma in place with an accuracy of just a few millimetres for more than four seconds at a temperature of 25 million degrees Celsius.

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