

Ganges Kobadak Project : Time to Look at

by Amjad Hossain Khan

The Ganges Kobadak Irrigation Project has taken a long time to come to its present stage. It is high time that the project should deliver full benefit to the people ... more so after the signing of Ganges Water Treaty and assurance of dry season flows...

THE Ganges Kobadak Project is the first and largest irrigation project in the country covering the districts of Kushtia, Chuadanga, Jhenidah and Magura. The objective of the project was to increase the yield of crop production by irrigation.

The project was conceived in 1954 to irrigate a gross area of 1,97,500 ha of which the net irrigable area is 1,42,000 ha including an area of 17,000 ha in high land by second lifting of water. In the original concept local Aman was the predominant crop which needed supplementary irrigation.

The project was taken up in two phases: first phase covering a net area of 60,728 ha was taken up in 1955-56 and completed in 1969-70. In the second phase a net area of 81,272 ha was taken up in 1960-61 and completed in 1982-83.

As there was delay in installing the three main pumps government was anxious to provide water for irrigation parts of the area, a subsidising pump house was constructed with 12 pumps of 125 cusec capacities. The irrigation started in the project in 1962. During the first year of 1962-63, the coverage under Aus was 5,187 ha. In addition, supplementary irrigation for Aman for an area of 1808 ha was also provided with irrigation. The coverage under irrigation gradually increased over the years. Aman acreage increased steadily but Aus coverage was slow upto 1970-71 and then started increasing. This steady increase in Aus was practically stopped from 1992-93. During this critical period, irrigation under Aman increased. In 1961-62, acreage under Aman was 1804 ha only and in 1996-97, it reached 93,302 ha.

With the introduction of HYV varieties of rice in 1960 the requirement of water has increased manifold. As a result irrigation water could not be provided for the entire command area. But yield of rice production increased three to four times.

During the rehabilitation of the GK project, in 1985-95 the

consultants redesigned the canal system from tertiary downwards assuming a duty of 1 cusec for 40 acres for Aus and 60 acres for Aman. Fortunately, the project is practicing rotational system for irrigation in both Kushtia canal (Phase I) and the Ganges canal (Phase II) and there may not be an immediate crisis. But when farmers will get used to irrigation water and if the demands of both the phases has to be met there will be problem. The project have the maximum capacity of pumping 5,400 cusecs if all the pump of two pump houses are working during peak periods.

The three main pumps were manufactured by Hitachi, Japan in 1963. Due to some problems (not technical), the construction of the main pump house and installation of pumps were delayed and ultimately installed in 1969. The two pump houses helped the irrigation coverage of both Aman and Aus from 1972-73 onwards.

Uncertainty of availability of water for Kharif I (Aus) and IRRI Boro during the last 4/5 years forced the farmers of the project to install a large number of shallow tubewells. With the signing of the Ganges Water Treaty in December, 1996, and with assurance of dry season flows in the Ganges, the project has taken up a programme for Aus for 30,000 ha during 1997, which will gradually increase over the years.

During the long history of the project (35 years) since irrigation started in 1962, the maximum coverage for irrigation for Aman and Aus was 1,24,024 ha in 1991-92. Probably there is no programme of second lifting of water for the 17,000 ha high lands.

Irrigation

The project was originally designed for irrigation of improved variety of local Aman. The duty was assumed at 1 cusec for 100 acres. With introduction of HYV crops, the water requirement has increased. Rotational irrigation has been introduced in the project, to maximise the use of water with the present capacity of pumps. The

duty in the redesigned irrigation system is 1 cusec for 40 acres for Aus and 60 acres for Aman.

Pump House

There are two pump houses in the GK project. Main Pump House is with three vertical lift axial flow turbine pumps with differential blades for lifting 3,900 cusec. These pumps were manufactured by Hitachi, Japan in 1963 and installed in 1968. During erection it was reported that the vertical pump alignment was wrong and later on rectified by Hitachi. The pump No 3 was overhauled by Hitachi in 1987. Pump Nos 1 and 2 were overhauled by the Mechanical and Electrical Division of the project in 1991. One of the pumps was out of order since 1993. Recently Hitachi engineers came to inspect the pump, in November 1996, and if GoB agreed to the cost estimate, the repair works can be taken up. Presently two pumps are in working condition.

Some concern was noticed regarding lifting of the main pump house. The main pump house and the control room are two separate structures. The gap in the two structures were 148 mm in 1993 and same has increased to 152 mm in 1997. There is also some problem in the floor level of the main structure. The project authority is constantly watching the situation and requested for a detailed examination by a competent body.

The main pumps are working for the last 26 years. The model is also very old. Repair and maintenance have become costly. By repair and maintenance, it can continue for some time, not for all the time. Before a serious breakdown occurs which will disrupt the irrigation, the Government should

seriously consider replacing the pumps.

Out of the 12 subsidiary pumps, four or five are working and the rest are out of order needing costly repair and maintenance. These pumps were received as Dutch grant. The GoB has requested the Dutch Government for repair and overhauling of the subsidiary pumps.

These pumps are key to the whole GK Project, command area for irrigation. With assurance of dry season flow in the Ganges under the Ganges Water Treaty, the GK project has to ensure supply of irrigation water. As such repair, maintenance and overhauling of the pumps at periodic interval is essential.

Dredging of the Intake Channel

The intake channel of the pump house is located on the right bank of the Ganges about 1.5 km downstream of the Hardinge Bridge. The main flow is on the right bank, the intake channel is about 1.5 km long upto the pump house. Heavy siltation takes place after every monsoon. The channel is kept open by constantly dredging the channel upto the required depth. Three dredgers are constantly working from December to March so that pumps can operate during the peak period. Dredging is costly. Measures for diverting silt free water should be undertaken.

Power

The power needed for operation of the pumps is 14 megawatt. A 132/5.5 KV sub-station was constructed by the project in 1991-94. The substation could not be commissioned due to lack of trained personnel and requested PDB to commission the sub-station. Once the grid sub-station is commissioned

there will be a saving of Tk. 11 crore in electric bills. The power house at Bheramara under the PDB has a capacity to generate 60 MW of power. Overhauling of the power house was going on.

Telecommunication

To run the irrigation system of such a big project, coordination between Head Office at Kushtia, Pump Houses, all regular sites at far away areas is essential. The pumps are operated according to the demands for irrigation in Phase I (Kushtia Canal) and Phase II (Ganges Canal). The operational schedule are worked out by the project officials in consultation with engineering staff and extension personnel. The farmers

are constantly interacting with them regarding repair and maintenance of the field channel. The guideline for people's participation is also being followed. The field level policy should not be changed frequently as it creates confusion among the farmers. During the rehabilitation of the project all the structures were modified and redesigned for smooth flow of water in the field.

Field Channels

In the original concept, the project authority dug the field channels. Later on the policy was changed. The construction operation and maintenance of the field channel is now the responsibility of the farmers. The committee/group of one outlet keeps the channels clear of shrubs and resection, where necessary, to receive water before irrigation starts.

The extension people of the project constantly help the farmers at all stages. A close coordination and interaction is essential between project officials and farmers.

Extension Service

The project has one Chief Extension Officer and three Extension Officers based in Kushtia, Jhenidah and Saikupa. These Extension people work in close coordination with project officials and help farmers with advice on improved method, water management and forma-

tion of committee/group. Recently the government has taken a decision that all extension works of the project will be done by the Directorate of Agriculture Extension (DAE) under the Minister of Agriculture. This decision has already created a confusion among the extension staff of the project as they will not be absorbed in the DAE cadre. The interaction and coordination between project official and District Agriculture Officer is yet to be sorted out.

The concept of this idea is that the project officials will be responsible for taking water up to the outlet. Beyond the outlet the DAE will take over including formation of committee/group and motivate farmers for irrigating their lands. The dual responsibility of works was tried in the Chandpur Irrigation Project long time back and failed. Why it was again introduced in the GK project is not clear. As far as is known, the extension service of the BWDB is there since irrigation started in 1962 and working satisfacto-

payment of water taxes. It will also help in close coordination among farmers, Patwaris and extension people. Problem at field level should be solved in the field.

Operation and Maintenance

The repair, operation and maintenance of such a big irrigation project is expensive but must be done regularly if the system has to function smoothly. Normally inadequate fund is given for O & M. The project was declared complete prematurely and adequate fund was not available for O & M. FFW programme was introduced for repair of embankments including excavating canal beds for silt clearance. After 22 years since the operation started, a large scale rehabilitation programme of Tk 212 crore was taken up in 1985-95 but many important works were left out needing costly repair now.

For normal annual maintenance, adequate fund should be given. The establishment cost of the project is high. Surplus staff should be transferred elsewhere or given a golden handshake to reduce the cost.

Minimizing Waste

During the initial period of the project, irrigation was given to flood the fields and excess water used to go down the drains. Gradually it became clear that water is a precious input and all its wastage must be avoided. Water Users Association was formed throughout the project and outlet committees helped in minimizing the wastage to a great extent. When irrigation water is given either by day or a night from an outlet, adequate measures should be taken to see that the outlet gate is closed after watering their fields. This will help other WUA to have water for irrigation. The accumulated wastage create shortage of water at the tail end of the system.

Fishery

The network of canal system with water upto the brim level can be a rich source of fish culture. Presently it is not practiced in the project area. The reaches between two structures can be leased out and will earn huge revenues.

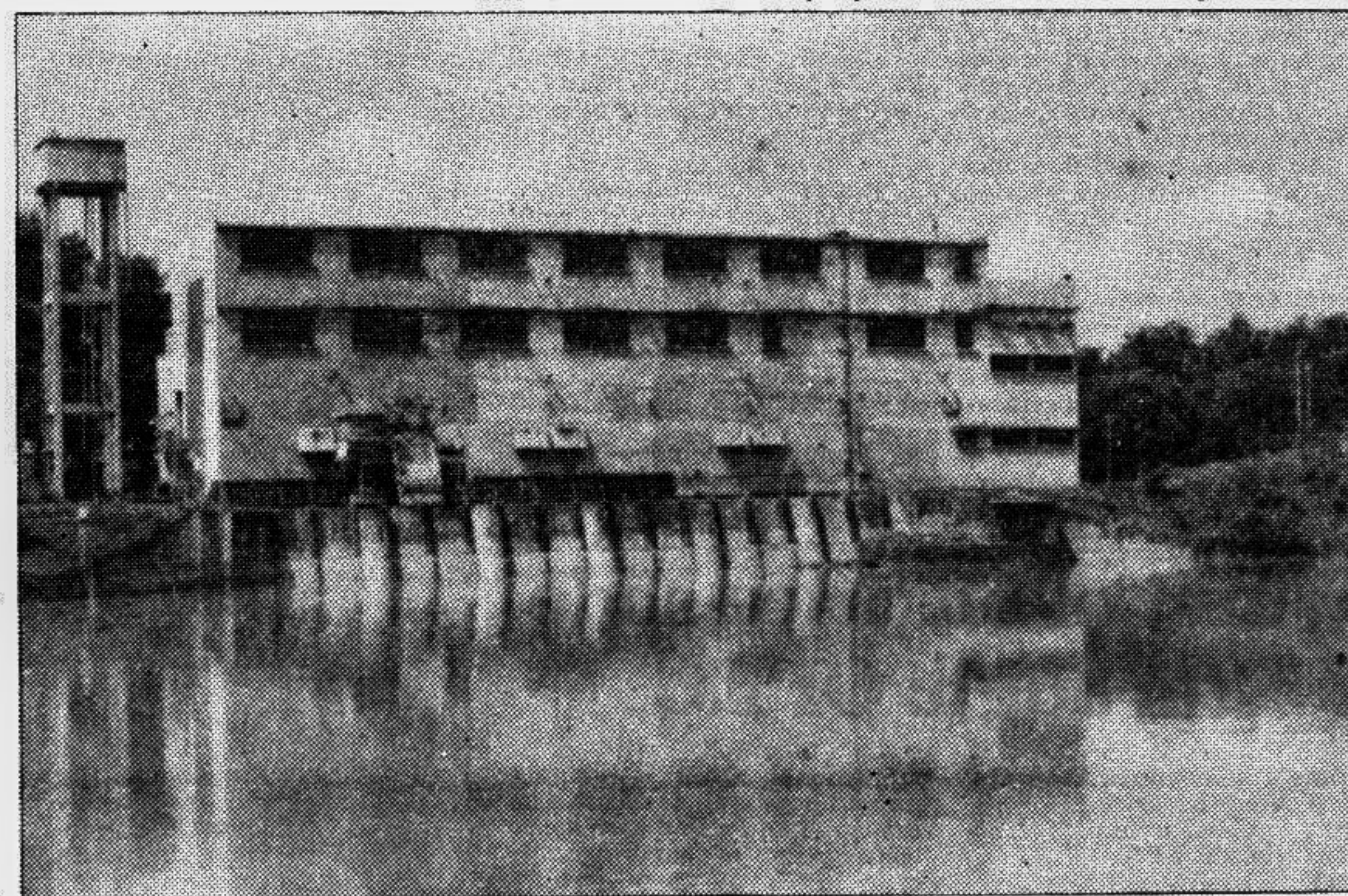
The Ganges Kobadak Irrigation Project has taken a long time to come to this stage. It is high time that the project should give full benefit to the people. Some major decisions like replacement of pumps need to be taken soon.

The benefits of flood control and drainage is largely compared to the irrigation only. At present water tax is realised from the farmers who produce crops. Besides farmers, a large section of people including industries get the benefit of flood control without paying any taxes.

All people living in the command area of the GK project should pay development taxes. The income from this development tax should be spent in the O&M of the GK project.

The idea of development taxes may be introduced for the whole of the country wherever there is development works done by different agencies of the Government. The old concept of realizing tax only from the farmers and direct beneficiaries should be replaced by a broad-based developed tax to be levied in general for every body to pay tax.

The author is former Chairman, Bangladesh Water Development Board.



The Ganges-Kobadak pump house

Tom and Jerry



James Bond



Metropolitan

'Consensus must to root out child labour'

State Minister for Labour and Manpower M A Mannan yesterday stressed the need for consensus of all to root out child labour completely from society, reports BSS.

The state minister was speaking at the inaugural of a five-day national workshop on banning child labour at a city hotel, organised by International Textiles, Garments and Leather Workers Federation (ITGLWF) and Bangladesh National Coordination Committee (BNCC).

Presided over by BNCC President Mujibur Rahman Bhuiyan, the inaugural ceremony was also addressed, among others, by ILO Country Coordinator Dr Wahidur Rahman, ITGLWF Education Secretary Steve Grinter and ITGLWF Health Secretary Silvana Capucio.

Mannan said child labour had been rooted out from the garments sector and arrangements were made to provide education to these children. He also stressed the need for mass awareness in this regard.

At least 25 trade union leaders from different federations are taking part in the workshop.

Training programme on 'gender analysis and planning' ends

A three-day training programme on 'Gender Analysis and Planning' concluded yesterday at the CIRPAD auditorium in the city with Akmal Hossain, Secretary, Women and Children Affairs Ministry, in the chair.

The programme, organised by the Advocacy, Awareness and Strengthening of Information for Women in Development Project (AASIB), Department of Women's Affairs, was attended by 18 government officials from various ministries and departments.

The objective of the two-part training programme, held in four phases, was to formulate a 'national action plan on women's development'. The participants, who are already associated in the decision-making process, were familiarised with gender sensitised issues like human rights of women, women as human resources, women in economy, poverty alleviation, decision-making.

Three more similar training programmes will be held July 8-10, August 12-14, and August 23-25, said Zakia Yasmeen Joarder, project director of AASIB for WID project, adding, 'We expect to implement the action plan after it gets the appraisal from the Prime Minister's Office.'

Deputy Speaker visits Ershad

Deputy Speaker Advocate Abdul Hamid yesterday visited former president and Jatiya Party chairman HM Ershad at the National Institute of Cardiovascular diseases, reports BSS.

Weather Moderate rain likely

Moderately heavy rain is likely at places over the country in the next 12 hours till 6 pm today, reports UNB. Met office also forecast light to moderate rain or thunder-shower accompanied by temporary gusty wind at many places over Chittagong, Barisal and Sylhet divisions and at a few places over Rajshahi, Dhaka and Khulna divisions.

Day temperature may remain nearly unchanged throughout the country. In its outlook for subsequent two days weathermen predicted little change and increase in rainfall activities in the following five days.

Meantime, Khulna had 34 mm shower and Jessore 15 mm shower in the last 24 hours till 6 am yesterday.

Country's highest temperature 34.8 degree Celsius was recorded at Chuadanga and the lowest 22.2 degrees at Rangamati.

The sun sets today at 6:50 pm and rises tomorrow at 5:13 am. Maximum and minimum temperatures and humidity recorded in some major cities and towns yesterday were:

City/Town	Temperature in Celsius		Humidity in percentage	
	Max	Min	Morning	Evening
Dhaka	33.6	25.2	78	67
Chittagong	32.6	25.4	79	78
Rajshahi	34.7	25.6	74	60

HERE and THERE

IUB

The Independent University, Bangladesh (IUB), has just concluded three one-day seminars on competitive manufacturing for senior executives of 21 major companies of the country. The seminars were organised by the Extension and Continuing Education Centre of the university and conducted by Prof H Paul of the Asian Institute of Technology, now a visiting professor at IUB's MBA programme, says a press release.

The participants were awarded certificates at a simple ceremony on Saturday at a city hotel by IUB trust chairman Sulaiman Chaudhury, IUB Rector

Audit and Accounts

Training Academy

A four-day second orientation course on 'Law in office management' for senior officers of the Audit Department was inaugurated by M Hafizuddin Khan, Comptroller and Auditor General of Bangladesh, on Sunday at the Audit and Accounts Training Academy. Amin Ullah, Secretary, Ministry of Law and Justice, was special guest, while Asif Ali, Director General, Audit and Accounts Training Academy, presided.

Capital invested in 1,330 new small industries, JS told

Minister for Commerce and Industries Tofael Ahmed yesterday told the Jatiya Sangsad that capital was invested in a total of 1,330 new small industries and 14,035 new cottage industries from July 1, 1996 to May 31, 1997, reports BSS.

Besides, loans were granted to the existing 137 small industries and 12,159 cottage industries during the period, he said while replying to a question from Prof Shahidul Islam (BNP-Kushtia).

He said the Board of Investment had registered 1,057 industrial units for domestic investment and 117 industrial units for joint 100 per cent foreign investment in the private sector from July 23, 1996 to May, 1997.

The minister also said that a total of 42 investors from home and abroad had invested their capital for setting up industries in the Dhaka and Chittagong Export Processing Zones (EPZs) from July 23 last year to date.

Under the scope of Bangladesh Small and Cottage Industries Corporation (BSCIC), a total capital of Tk 12.635 lakh was invested both in new and existing industries, Tofael said.

The amount of capital invested by domestic and foreign investors under the EPZs was US dollar 46.207 million, he said.

Of those registered with the Board of Investment, domestic entrepreneurs proposed Tk 37.642 million and the foreign investors proposed Tk 19,021 million as investment.



A rally was brought out in observance of 'Palashi Dibosh' (Plassey Day) in the city yesterday.

— Star photo