

# FOCUS

## Asian Agriculture and the New Millennium

by A Z M Obaidullah Khan

*Seven out of every ten of over one billion people in the world today who are struggling to survive on one dollar a day, subsist in Asia. The greatest absolute number of undernourished people — about 68 per cent of the total in 1990 — huddle in Asia and they cluster in the densely packed rural hinterland.*

AGRICULTURE'S historical sweep in Asia is well known. Natural scientists report that almost half of the plants in Asia originated in China and India. Rice or *Oryza Sativa* was sown to the north and west of Deccan plateau in India during the first millennium before Christ and by the seventh century BC rice fields had spread eastward to the Ganges Delta. Thousands of years ago farmers in India chanted an ancient Vedic hymn: "Harness the ploughs, fit on the yokes, now that the womb of the earth is ready to sow the seeds therein." Historians further record that by the fifth millennium before Christ, Chinese farmers were harvesting millet; and that peas and water chestnuts were being grown in the Spirit Caves of Northern Thailand as early as 7000 BC. Human kind's cycle of life and death in Asia blended with land and water and their offerings as people reached out for values beyond food and physical survival.

Agriculture's critical importance to men and women of this diverse region is obvious. This region harvests nearly 90 per cent of the world's rice, 30 per cent of its wheat, 20 per cent of the coarse grains and about 50

per cent of its fish. They plant and harvest food and agricultural products to meet spiraling needs of over three billion people (and the absolute number is increasing every year in spite of fertility decline), within less than a third of the world's arable land.

The share of agriculture in the GDP has no doubt, declined over the last three decades from 40 per cent in 1965 to 23 per cent in 1991. The 27 developing countries of the Asia-Pacific region continue to account for 73 per cent of the world's agricultural population. Although the ratio of agricultural population to total population has declined from 72.8 per cent in 1961 to 58.5 per cent in 1994, the agricultural population itself has increased in absolute numbers.

### The Setting

Jesuit Scientist Pierre Teilhard de Chardin once said, "The past has revealed to me the

structures of the future." Taking stock of the past, perhaps, offers a useful starting point for crystal-gazing into the elusive shape of what is distant and in the future.

Between the seventies and the eighties, countries in Asia definitely shed the spectre of widespread hunger and famine in not too distant past. Regional cereal production grew at a rate of almost 3 per cent a year, thus pulling ahead of the region's population growth and outstripping the more than 1 per cent growth in cereal production achieved by the rest of the world. Four out of six major countries worked their way into self-sufficiency. In some countries full granaries mean enhanced food-security. Asian developing country stocks rose from an average of 60 million tonnes for 1974-76 period to 93 million tonnes for 1988-90. Stocks peaked to 133 million tonnes in 1992-93. In 1994-95, however, it was 8 per cent less than the peak. Further, during 1961-63 to 1987-90, per capita food supplies of cereals, on average, increased from 131 kg per year to 182 kg.

There are deep human values in these gains. The number of chronically undernourished people in Asia dwindled from 751 million in 1971 to 523 million in 1990.

Nonetheless, seven out of every ten of over one billion people in the world today who are struggling to survive on one dollar a day, subsist in Asia. The greatest absolute number of undernourished people — about 68 per cent of the total in 1990 — huddle in Asia and they cluster in the densely packed rural hinterland. In fact, if one considers the Capability Poverty Measure rather than income poverty alone, 76.9 per cent, 61.5 per cent, 60.8 per cent and 42.3 per cent were capability poor in 1993 in Bangladesh, India, Pakistan and Indonesia, respectively, compared to the corresponding figures of income poor of 47.5 per cent, 25.4 per cent, 34 per cent and 16.7 per cent.

One is reminded of a haunting story set in the desperate landscape of a dying and town by a harsh sea. When Old Jacob's wife caught the smell of the roses, she knew she was going to die and so she did. At that time, the contaminated sea was phosphorescent and fragrant. She was cast into the flowerless sea. And Mr Herbert, an out of town rich person, came in and splashed his money, gave the dying townspeople mist of hope and took over the clapped-out house of Old Jacob in exchange of winnings in chequer game. After a week of revelry, he yawned and flopped on to his bed.

"You're going to die from that life you lead," old Jacob said. "I've got so much money that there's no reason for me to die," Mr Herbert said. He slept for days on end and people grew tired of waiting. They had to dig crabs to eat.

When Mr Herbert woke up he said, "I am starving to death." "So is everyone else," Old Jacob said. "There's nothing to do but go to the beach and dig for crabs."

Tobias found him scratching the sand, foaming at the mouth, and he was surprised to discover that when rich people were starving they looked so much like the poor. (The Sea of Lost Time, Gabriel Garcia Marquez, 1961).

This searing image of degrading hunger and exhausted earth is perhaps an apt prelude to the issues that follow.

### Urban Implosion

These rootless impoverished people are moving, in ever greater numbers into marginal coastal areas or ecologically brittle highlands. Ecological "boat people", in turn, are force-feeding migration-streams backing up into huge crowded urban slums.

It would be unwise to underestimate the pressures swirling within what is clearly the greatest urban mass-migration in human history. UN demographers have tracked the powerful surge, worldwide, in the

annual rate of growth of urban populations: 3.64 per cent in the sixties, 3.9 per cent in the seventies and 4.73 per cent in the eighties. Population in the Asia-Pacific region is expected to increase by nearly two-fifths from 2.7 billion in 1989-90 to 3.7 billion in 2010. By that time, almost half of the region's inhabitants are likely to reside in cities.

Mega-cities will alter landscapes. By the year 2000, there will be 45 such cities worldwide with population exceeding five million compared to only six in 1950. Most will be in Asia. Calcutta, for example, may swell to over 20 million; 24 million will crowd an affluent Tokyo; 19 million will jam Beijing; 14 million Seoul, and 12 million Manila.

The urban sprawl will bury, in concrete, more farmlands that ring the cities. In the Philippines, it is estimated that around 24,000 ha. of irrigated farmland are lost every year to urban and industrial encroachment. The figure of 60,000 ha is quoted for Pakistan. In China, no less than 330,000 ha of good agricultural land due to the conversion of farms to industrial development and other non-agricultural uses. As fragmentation of arable land continues, per capita availability will shrink from 0.23 hectares in 1975 to 0.15 by the year 2000. Meeting food needs of both mega-cities, and the countryside are bound to test the wit and will of Asian leaders and resilient farmers. If urban growth, for example, builds up further to 5 per cent per annum, food to sustain these swollen cities must double every 14 years, merely to keep pace with the rise in numbers.

In reality, actual food-needs are likely to be higher. The few and the powerful will rearrange their menus with rising levels of income and changing consumption patterns. Unless grain-saving alternatives are on the cards, more food-grains will be diverted for animal feed. The question is: will the improv-

ished many and the majority small farmers in Asia be able to produce and scrounge enough for sheer survival? Can Asia untangle this unsustainable paradox of hunger amidst surfeit?

### Ecology and Agriculture

The preceding three decades have seen substantial advance in efforts to produce food. But problems were emerging just beyond the horizon. Output from the world's once resilient ecosystems started to falter in the early 1990s. Downward slide in cereals production was matched by similar trends in fisheries and livestock, ratcheting the pressure on shrinking croplands. FAO's report to governments at the 17th Session of the Committee on World Food Security in 1992 documented the decline of cereals output by 4 per cent. Cereal production in Asia dipped by 1.6 per cent from a year earlier.

Arable lands, as mentioned earlier, are at their thinnest slivers in Asia. In just twenty years, the balance of limited uncultivated land will be halved in South Asia. East Asia's will be sliced by a third.

### Water Scarcity

Many aquifers have been pumped into salt-contaminated jugs. Water supplies today have slipped into a third of what they were in 1950s. Asia already uses half the world's water. By the year 2000, Asians will use 60 out of every 100 gallons. Most will be groundwater although aquifer withdrawals will exceed recharge in many areas. Crippling water-shortages have appeared in North China, West and South India. Overuse of ground waters is a policy issue in the Philippines and Thailand. Annual withdrawal of water for agriculture reached 474 cubic meter per capita in 1990, which is a little over 10 per cent of the per capita internal annual renewable water resource of 4684 cubic meters.

"Water-tables are falling, rivers are drying up and competition for dwindling supplies is increasing," writes Sandra Pastel of the World-watch Institute. A World Bank study points out that water supplies "in China are being siphoned away from farmlands surrounding Beijing in order to meet rising urban and industrial demands." Cities and industries can afford to pay more for water and earn a higher economic return per unit of water. Naturally, water flows uphill to money. The irony here is that irrigated agriculture is expected to produce much more in the future. Food security in Asia is inextricably linked with water security.

(To be continued tomorrow)

The author, a former Minister and a Secretary of Government of Bangladesh and also our Ambassador to Washington, has recently retired as Assistant Director General for Asia-Pacific of FAO.

## Dhaka Day by Day

### Computer on the Desk

by Samia Islam



SHARIF '97

These days many offices all across the country have endeavored to take a massive technological leap of faith by resorting to computers for most of their paper work and filing. Office automation has become the top priority in this country to keep up with the demands of the time. Apart from the benefits of getting rid of the proverbial paper trails, the constant misplacing of documents and storage problems, this initiative also provides most users with cleaner desks, reduced work load, easier access to information and data-sharing through networking and last but not the least, entertainment in the form of computer games. It is true, however, that there are some unscrupulous people who are just at the office to play, regardless, shirking their official responsibilities.

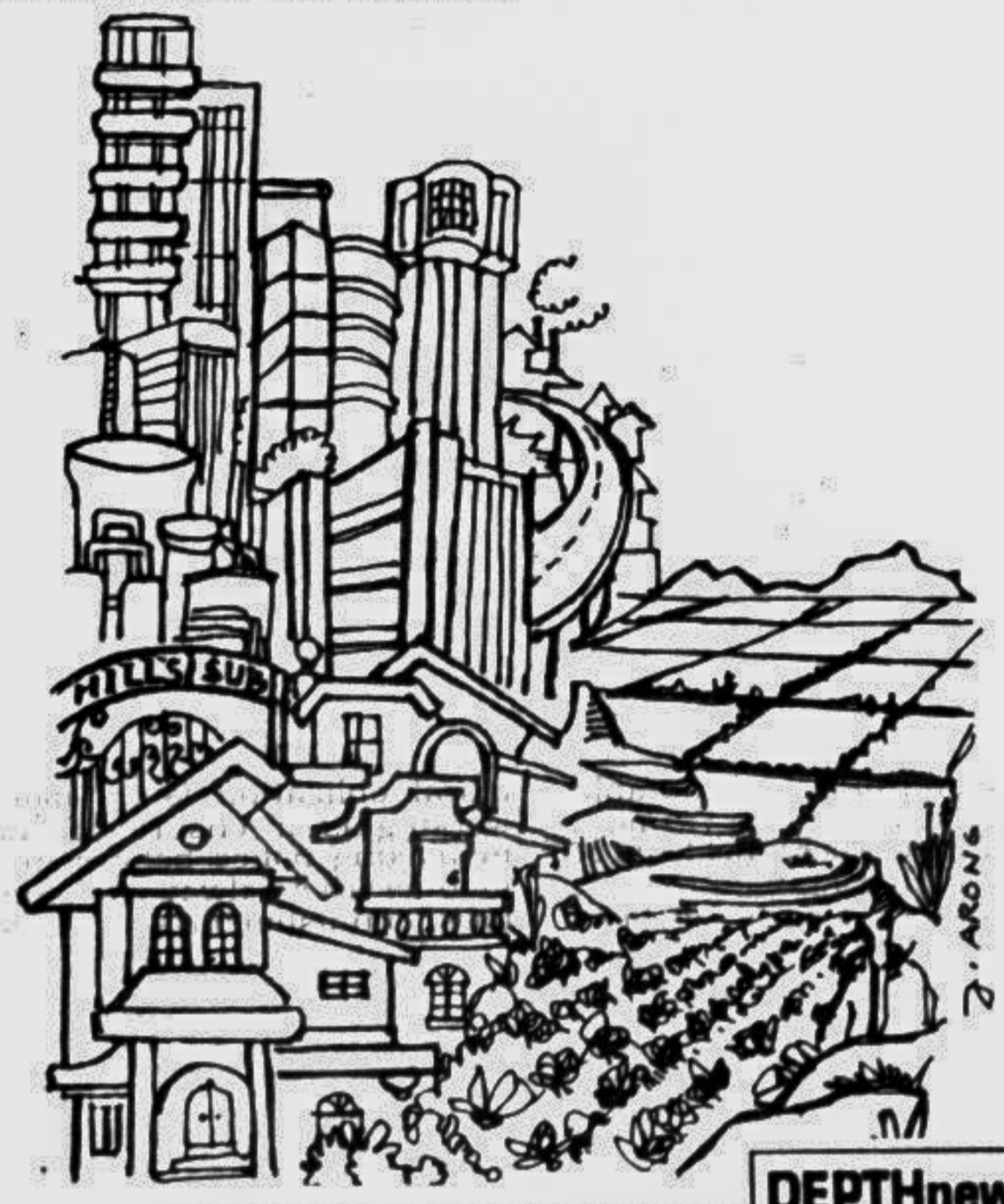
Even if one is just doing serious official work on the PC like writing reports and making spread sheets, some times the low level of actual know-how about a computer could really be quite an eye-opener. There's a sort of rule of thumb even among the people who go around claiming they are computer support personnel. It's all basically trial and error. Nobody, however self-important they may appear to be, really knows what is going on and everything is just left up to the compassionate generosity of lady luck. Everytime a computer hangs, one finds people with a look of utter helplessness on their faces. A simple thing as copying a file to disk can entail as many as three tutoring sessions and very few have the courage, or whatever it takes, to try out commands on their own without supervision. A PC is revered, feared and not mastered. Instead it becomes the master through sheer power of intimidation, just by sitting on a desk looking imposing and mysterious. Since the prohibitive cost of computers are well known, there's always the thought of "destroying it" at the back of every new user's mind. But there are very few instances where one can actually achieve or get close to destroying a PC with a single wrong click of the mouse. However, not many are aware of this fact. As everything is taken to be as serious a business as, say, eye surgery, fear obstructs learning. There are people who use word processors but would rather not use the spell check or thesaurus or justify their write-ups for fear of doing the wrong thing and losing the document altogether. My advice to such people is that: stick to a type writer, you are definitely not PC material!

Then there's the virus-fear that plagues all concerned. But no matter how apprehensive users are, they will never run antivirus programmes regularly to keep their computers and diskettes virus-free.

As for games getting in the way of business, prudent office administration with the help of the "computer personnel" can adopt the elimination strategy to ensure everybody is producing their money's worth by surreptitiously deleting the games directory from the hard disks under the pretext of emptying disk space to make the PC run faster. This is the next best excuse to saying that the dog ate it!

## No EXCUSE...

"Exploding cities" turn vital croplands into subdivisions and processing zones. This destabilizes food supplies. There's no excuse for governments to neglect adopting forward-looking land use policies.



DEPTHnews

	Calories per day				Kg. per year					
	1961/1963	1969/1971	1979/1981	1988/1990	Projected 1961/19	1969/1971	1979/1981	1988/1990	Projected 1990	
South Asia	1970	2040	2100	2220	2450	139	148	153	156	163
East Asia	1730	2020	2340	2600	3040	126	151	181	201	206
Asia Total	1820	2030	2240	2440	2780	134	150	167	183	186

Year	Per Caput Food Supplies (Cal/Day)	Total Population (Million)	Undernourished	
			% of Total Population	Million
East Asia 1969/71	2020	1147	44	506
1979/81	2340	1382	26	366
1988/90	2600	1598	16	258
South Asia 1969/71	2040	711	34	245
1979/81	2100	892	31	278
1988/90	2220	1103	24	265

Source: FAO

## The Daily Star Entertainment Guide



Tuesday 18th February (All programmes are in local time. There may be changes in the programmes.)

### BTV

3:00 Opening Announcement  
 3:10 News in Bangla 3:15 Patriotic songs 3:20 Recitation from the Geeta 3:25 The Album Show 3:50 Cartoon film 4:15 Umesh 4:50 Coach 5:00 News in Bangla 5:22 Sangeta 6:00pm National Television Debate Competition 6:50 Open University 7:00 The News 7:25 Silver Jubilee of Freedom Fighter-A Documentary 8:00 News in Bangla 8:25 Silver Jubilee of Freedom Fighting-Mujibnagar Govt 9:00 Drama Serial: 10:00 The News 10:25 Those day of Freedom Fighting 10:30 sur Lahare 11:35 Wednesday's programme summary 11:40 Close down

### BBC

6:00am BBC World News 6:10 Newsnight 7:00 BBC News-

room inc. World Business Report/Asia Today/24 Hours 10:00 BBC World Headlines 10:05 World Focus: Panorama 10:45 The Panel 11:00 BBC Newsday 2:00 BBC World News 2:15 World Focus: Panorama 3:00 BBC World News 3:30 Time Out: Tomorrow's World 4:00 BBC Newsdesk 6:00pm BBC World News 6:15 World Focus: The Money Programme 7:00 BBC World News 7:15 World Business Report 7:30 BBC Newshour Asia & Pacific 8:30 Time Out: Holiday 9:00 BBC World News 9:15 World Focus: Panorama 10:00 BBC World News 10:30 Time Out: Top Gear 11:00 BBC World News 11:30 Time Out: Film '97 12:00am The World Today 2:00 BBC World Headlines 2:05 World Focus: Panorama 2:45 The Panel 3:00 BBC World News 3:30 Time Out: The Clothes Show 4:00 BBC World Report inc. World Business Report/24 Hours

### CHANNEL V

6:30am The Ticket 7:00

Rewind VJ Sophia 8:00 Frame by Frame 9:00 Jump Start VJ Alessandra 10:00 Frame by Frame 11:00 The Vibe VJ Luke 12:00 Rewind VJ Sophia 1:00 By Demand VJ Trey 2:00 Frame by Frame 2:30 Liberty First Day First Show 3:00 The Indian Top 10 4:00 Frame by Frame 4:30 Big Bang VJ Alessandra 6:00 Rewind VJ Sophia 7:00 By Demand VJ Trey 8:00 Planet Ruby 9:00 The Vibe 10:00 First Day First Show 10:30 Soul Curry 11:00 Speak Easy 11:30 The Ride 12:00am Over The Edge VJ Sophia 12:30 Big Bang VJ Alessandra 1:00 Haysah 2:00 By Demand VJ Trey 3:00 Big Bang VJ Alessandra 4:30 Billboard US Countdown

### STAR PLUS

6:30 Nmaad 7:30 Star News 8:00 Sky Business News 8:15 Business Agenda 8:30 Star News 9:00 Sky News 9:30 Aerobics Oz Style 10:00 Yan Can Cook 10:30 El For Your Entertainment Hotels Of The Vegas Strip 11:00 Kates & Allie 11:30 The Oprah Winfrey Show 12:30 The X Files 1:30 Santa Barbara 2:30 The Bold & The Beautiful 3:00 Hindi Serial: Imtehan 3:30 Hindi Serial: Khandan 4:00 Hindi Serial: Tu Tu Main Main 4:30 Land of the Giants 5:30 Black Beauty 6:00 Kates & Allie 6:30 Yan Can Cook 7:00 Hindi Serial: Janata Ki Adalat 7:30 Star News (Hindi) 8:00 Small Wonder 8:30 Hindi Serial: Kya Baat Hai 9:00 Meri Awaz Suno 9:30 Star News 10:00 Some Mothers Do Ave 10:30 Baywatch Nights 11:30 The Bold & The Beautiful 12:00am Santa Barbara 1:00 Star News 1:30 Baywatch 2:00 Dynasty 3:00 Quincy 4:00 The Oprah Winfrey Show 5:30 Barnaby Jones

### STAR SPORTS

6:30am The Asian Honda Classic Day 1 & 2 HIL 7:30 Trans World Sport 8:30 Inside PGA Tour 9:00 Spanish F'ball League HIL 9:30 Indian Open Badminton Day 3 12:30 Standard Chartered Marathon, Hong Kong-Shenzhen (China) Today 2:00 BBC World Headlines 2:05 World Focus: Panorama 2:45 The Panel 3:00 BBC World News 3:30 Time Out: The Clothes Show 4:00 BBC World Report inc. World Business Report/24 Hours

Marathon, Hong Kong-Shenzhen (China) 1997 Highlights 1:30 Thai Kickboxing Highlights 2:30 Inside PGA Tour 3:00 Volvo World Cup Showjumping 06/97 4:30 ISU Skating Nations Cup 5:30 Australian Open Night 6 Highlights

### STAR MOVIES

7:30am Family: Dusty (Arabic Subtitles) 9:30 Comedy: Without A Clue 12 (Arabic Subtitles) 11:30 Classic: It's Not Cricket PG (Hindi Subtitles) 1:30 Family: The Never-Ending Story PG 3:30 Comedy: House Party II 5:30 Comedy: Wild West 15 5:30 Comedy: Party II 7:30 Family: A Summer Story 15 (Hindi Subtitles) 9:30 Hollywood One On One 10:00 Action: Op Center (Part 1) 15 (Hindi Subtitles) 12:00 Thriller: Stranded 18 (Arabic Subtitles) 2:00 Action: No Way Out 18 (Arabic Subtitles) 4:00 Comedy: Twist 18 5:30 Documentary: Love Potion 15 (Hindi Subtitles)

### ZEE TV

5:00am Jagran 5:30 Suno Bhai Sadho 6:00 The News 6:30



Holiday on BBC World, Tonight at 8:30

Home Improvement 10:55 Milli Naghma 11:00 Khabrain 11:10 Anita (Serial) 12:00 Sports Hour 12:55pm Quran-e-Hakeem 1:02 Bismillah 1:15 The Science Show 2:00 Yeh Jahan (Music video) 2:25 Animated Classics 3:15 Geography & Sammar School 4:20 Milli Sona 5:00 Alish Huma Labbaik 5:25 Gabhi Mein Soochta Hoen (Drama Serial) 6:25 Ayou Courses 7:00 Dhanar: 7:45 English News 8:15 UN Quiz 8:45 Jab (Drama Serial) 9:00 Break for Headline News 10:00 Khabarnama 11:20 VCD Top Ten (Pakistan Video Countdown) 12:30 Dr. Qain: Medicine Women (Jean Saylor) 1:35 Khas Khas Khabrain/Close down

### EL TV

6:30 Music Time 7:30 Ched Chad 8:00 Hindi Feature Film 11:30 Newsline 12:00 Meri Marzi 12:30 Young Buzz 1:00 Bengali Serial 1:30 Bengali Serial 2:00 Music Time 3:00 Karz

### PTV

8:00am Tilawat Aur Tarjuma/Khabrain 8:20 Cartoon 8:30 Khabrain 8:45 Beauty Care 8:50 Fun Katha 9:10 Dhanak & Health Tips 10:05 Har Taan Hely Deepak 10:30 English Film



House Party on Star Movies, Today at 3:30

### DD 7

10:30 Jamnadin 10:35 Classical Music 11:00 Ghare Baire 12:30 Monorama Cabin (Serial) 1:00 Janmabhumi (Serial) 1:30 Trishna 2:00 Pathaykram 2:30 Bakul Katha (Serial) 3:00 Aaleya

(Serial) 3:30 Amargeet/Bigapti (Serial) 5:05 Science Prog-Big-Prasange 5:20 News 5:30 Employment News/Lalika 6:00 Falli Katha 6:30 Teeka Kanya 7:00 Bakul Katha Serial 7:30 Bangla Sambad 7:55 Dinandan 8:00 Aaleya (Serial) 8:30 Darpan 9:00 Janmabhumi (Serial) 9:30 Monorama Cabin (Serial) 10:00 Bengali Movie Club Film Show 1:00 Closed

### SONY ET

8:30am Khoya Khoya Chand 9:00 The Three Stooges 9:30 Dennis The Menace 10:00 I Dream Of Jeannie 10:30 Surf-Wheel Of Fortune 11:00 Ghaay 11:30 Zamana Badal Gava 12:00 Boogie Woogie 12:30 Good Shot 1:00 Pehli Mulakat 1:30 The Young And The Restless 2:30 Cine Matinee-Hindi Feature Film 5:30 The Three Stooges 6:00 Dennis The Menace 6:30 Khoya Khoya Chand 7:00 Premier 7:30 I

Dream of Jeannie 8:00 Surf-Wheel Of Fortune 8:30 Cine Prime-Hindi Feature Film 11:00 The Young And The Restless 12:00 Taj Mahal Taki Dhina Din 12:30 Jeevan Manti 1:00 Sunday Ki Sunday 1:30 Surf-Wheel Of Fortune 2:00 Premier 2:30 Closed

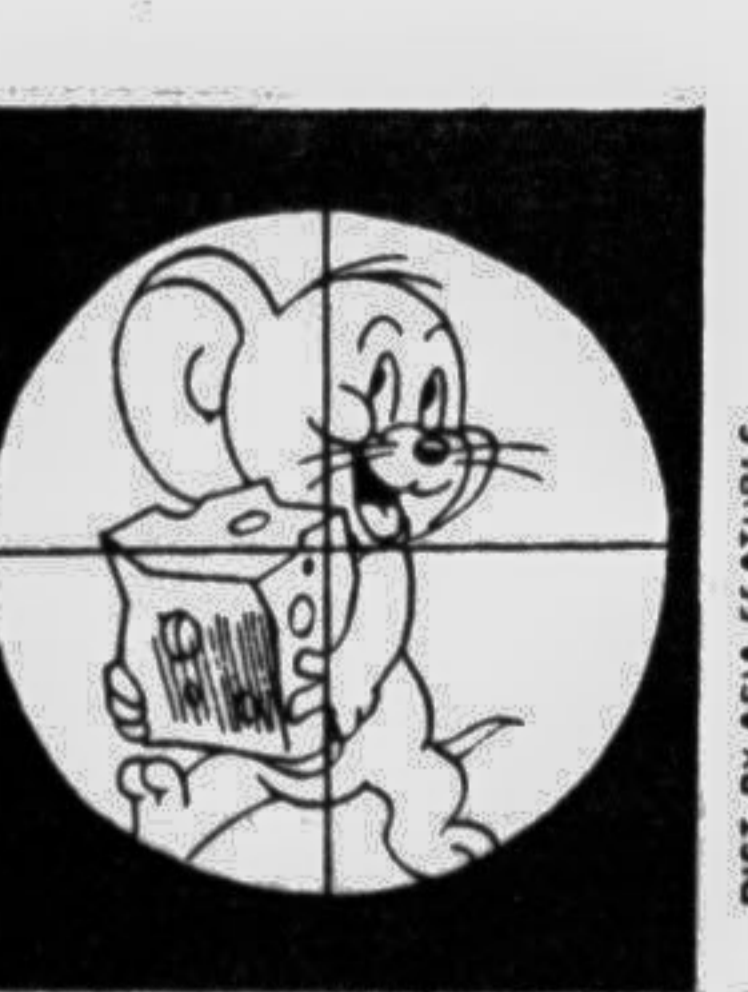
### ZEE CINEMA

6:45 Songs 7:00 Sheesha (Moon Moon S. Mithun C.) 9:00 TBA 9:30 Pyar Ki Jeet (Ashok K., Rekha, Shashi Kapoor) 12:15 Reruns 12:30 Gal Gulabi Nain Sharabi (Kiran K., Radha S.) 3:15 First Take 3:45 Udhav Ka Sindoor (Jeetendra, Asha P.) 6:30 Halo Na Madi Gare Ramaye (Gujarathi) 9:15 Cinema Cinema 9:30 Movies Masti Magic 10:00 Jaadugar (Amithab B., Jaya P.) 12:45 Raja Aur Rana (Ashok K., Pran) 3:30 Ikke Pe Ikke 4:00 Hai Men Jan (Sunil D., Hema M.)

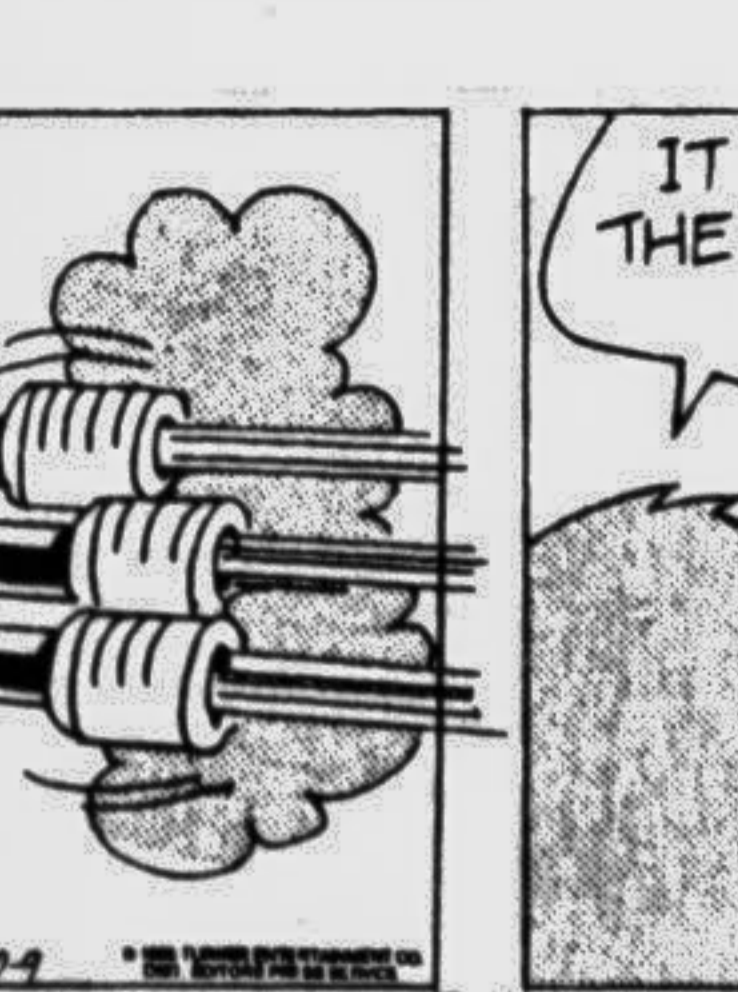
### Tom and Jerry



IAN FLEMING'S James Bond



DRAWN BY JOHN McLUSKY



IT WAS WORTH THE PRICE OF A TV SET.



ISN'T THEN SUPPOSE YOU DRINK IT YOURSELF!