

Feature

# Green beans bring in greenback

Not just beans, Hortex Foundation is cultivating pineapples, tuberoses and much more for export. Funded by the World Bank, this horticulture project reflects the country's potential of becoming a major player in the sector of agricultural export, writes **PROBE NEWS AGENCY**

**F**RENCH beans from Bangladesh? Far-fetched as it may sound, that's what Europeans do seem to like nowadays. Baby pineapples are a favourite, too. Thanks to Hortex Foundation, horticulture now poses as a promising export sector for the country with a growing market in Europe.

Hortex Foundation cultivate non-traditional items specifically with export in mind. Their target abroad is not the ethnic market, but the European consumers, hence the cultivation of French beans and other non-traditional vegetables and plants.

Grown on the slopes of the Chittagong Hill Tracts and Comilla, these fruits and vegetables, along with flowers, are now flying high across the continents and are growing in popularity abroad.

Hortex Foundation, funded by the World Bank under the project for agricultural advancement and reforms, was founded in 1992 with the aim of initiating and expanding the export of non-traditional horticultural items to the international market. However, it was not until the 1997-98 financial year that the project actually gained the envisaged momentum.

It was then the French beans, baby pineapples and other items from Bangladesh caught the eye of the European consumer, and their palate too. Exports have not been too large in volume. In 1997, 27 tonnes of

French beans were exported to Britain, France and Germany. In 1998 this increased to 40 tonnes. The amount may not have been too much in terms of international export, but this has opened doors to the potential market.

The reason why Hortex has specifically chosen to cultivate French beans, not a traditional item of Bangladesh, is that it is a great favourite on the European dinner table. So far Kenya, Mali and other countries of West Africa have had the monopoly of exporting French beans to Europe. Then agricultural experts noticed that French beans grew well in Bangladesh climate. Proper technology would ensure a year-round crop of the vegetable and had all the potential of proving to be commercially profitable. Previously, no one had experimental with French bean cultivation in the country so this has been a significant breakthrough in new items for export.

Hortex, through BRAC, is presently carrying out French bean cultivation in Comilla. Small marginal farmers as well as destitute women have been particularly absorbed in this programme. The tribal women of Chittagong Hill Tracts are adept at the farming of baby pineapples. The hill slopes of the region are most suitable for pineapple cultivation. However, the European prefer small pineapples to the ones generally grown in Bangladesh. High



Promise of increased flow of foreign exchange

quality pineapples are produced the year round by means of hormonal technology. The Hill Agricultural Research Station is situated on about 200 acres of land in Khagrachhari. Pineapples are grown of the grounds of the centre. Chief scientist of the centre Dr S Sabjal Uddin says that normally in the country pineapples are grown only three months a year. "However," he says, "a new technology has been formulated by the Bangladesh Agricultural Research Institute so that hormones ensure that pineapples are produced throughout the year."

Hortex Foundation has come forward to export these pineapples abroad. Dr Sabjal says, "It is quite possible to grow pineapples extensively in the Chittagong Hill Tracts. This will benefit the local people economically and also bring in considerable foreign exchange

for the government." The pineapples are harvested from the fields and packaged. Each package, bearing the green and red emblem of the Bangladesh flag, contains eight pineapples. On average, the pineapples weigh about 400 to 500 grams each. Much care is taken in the production and the packaging of the pineapples and the tribal women have proved themselves to be proficient at the task. Hortex Foundation provides the necessary training in this regard.

Hortex's efforts has shown the way to commercially viable private agricultural enterprise. The success of the endeavour has spurred the World Bank to take up yet another project by extending its financial support to Hortex by another three years.

The Hortex Foundation office is in Lalmatia, Dhaka. It is here that the entire process

from cultivation to export is coordinated. In its promotion of the export of non-traditional items, Hortex provides the producers with free implements and service. The Foundation is well aware that once this endeavour takes off, millions of tons will be exported regularly and such foundations will run independently. So the main objective of the foundation at the moment is to build a bridge between the marginal farmer/entrepreneur of Bangladesh and the entrepreneur of Europe.

Local and foreign exports of the World Bank in Dhaka are optimistic that the export of these non-traditional items will one day be a booming business akin to that of the ready-made garment industry. Promotion of such initiatives are bound to revolutionise the agricultural enterprise of the country and prove to be a boost to the national economy.

**I**N June, the *Washington Post* published an article, later circulated more widely in the *International Herald Tribune*, which for me drew attention to a dangerous mood of indifference in the United States to the phenomenon of global warming. The author of the piece, David Ignatius, offered a brief summary of the early evidence that a general rise in the surface temperature of the planet is starting to seriously affect wildlife of many varieties. The telling point, however, came right at the end:

"This is how bad it is: Representative Joseph Knollenberg, a Republican from the Detroit area, sponsored a successful rider last year that effectively bans the federal government from spending any new money to curb greenhouse gas emissions. Is there intelligent life on earth? You sometimes have to wonder."

Now I know nothing of Mr Knollenberg, but equally I have no reason to suppose that he is anything but an intelligent man. His Congressional Internet pages tell me that he was first elected in 1992 and that his constituents are among the most ethnically diverse and highly educated in America. Apparently a successful small businessman before he began his political career, he has promoted economic growth and free trade, an activity that has earned him praise from the US Chamber of Commerce, the National Association of

## Voice of the planet goes unheard

The evidence is growing that higher surface temperatures across the planet are already beginning to produce effects leading to an environmental and economic nightmare. Why, then, do some intelligent people in positions of authority still refuse to take the warnings seriously, wonders **Claude Martin**

**M**anufacturers and politicians on energy policy, yet it seems the expertise and the intelligence do not equate to reason. Mr Knollenberg sees only the claims — and they are merely claims — of the US energy industry that the emission reductions called for in the Kyoto agreement on climate change would cost the country up to \$300 billion a year and 2.4 million jobs. His intelligence is not stirred by the mounting concern over a looming catastrophe if the greenhouse effect now widely accepted as the chief cause of global warming is not reversed.

Empirical support for such concern is gathering inexorably. Last month the international conservation organization WWF and the Marine Conservation Biology Institute (MCBI) issued a report to publicise the work of an international team of marine scientists who have found that the effects

of global warming on the ocean environment are more advanced and more widespread than had previously been thought.

The report, *Turning up the Heat: How Global Warming Threatens Life in the Sea*, noted among other things that: "Recent declines in the population of Pacific salmon off western Alaska and of sockeye salmon in British Columbia appear to relate to exceptionally high sea temperatures."

"Off California, warmer seas are causing fish, crabs, snails and sea anemones to migrate closer to the Poles."

"Higher sea temperatures are linked to a sharp fall in the numbers of some seabirds owing to lack of food in a changed environment."

"The numbers of Antarctic penguins and seals are changing dramatically among species as the average air temperature

of the region rises.

These, I repeat, are early signs. What they suggest is that the full impact of global warming will hit not just wildlife but human life sooner than anyone has so far predicted. As WWF's Climate Programme Director, Adam Markham, puts it: "These disturbing results demonstrate that global warming is coming home to roost, affecting livelihoods and wildlife Americans cherish."

Lest anyone doubt this broader impact of climate change, let me turn to the veteran environmental campaigner Dr Lester Brown, who commented recently: "Of all the trends that affect us, none is quite as pervasive as temperature. In 1998, Earth's average temperature literally went off the top of the chart we have been using for years..."

That temperature increase, Dr Brown observed, produced

more evaporation and rainfall and contributed to more destructive storms that caused worldwide damage totalling \$ 92 billion last year. "Indeed," he went on, "damage in 1998 exceeded the total for the entire decade of the 1980s, even after adjusting for inflation."

So was this, asked Dr Brown, a glimpse of the future as rising atmospheric levels of carbon dioxide from fossil fuel burning lead to a climate that is spiralling out of control? Or was it merely an aberration that may never be repeated?

I wonder if Congressman Knollenberg, as an intelligent man, has asked himself that question. Dr Brown answers it in the following way: "We cannot know for sure, but what we know about climate models suggests that the event of 1998 could be a window on the future, a consequence of failing to rein in carbon dioxide emissions soon enough."

No, we cannot be sure. But then neither can Mr Knollenberg and the other congressmen and business interests that resist changes in emissions policy for narrow and sometimes selfish reasons. What we can do is take account of the swelling volume of evidence that something is wrong — for we ignore it at our peril. —WWF Feature

**M**ir also has had its share of visitors. Cosmonauts from Syria, Afghanistan, France, Germany, Austria, Great Britain, Slovakia, Canada, and the United States have made numerous visits. In 1992 the American space agency NASA and the Russian Space Agency (RSA) signed a commitment in which Mir would host a series of Americans on six-month sojourn. Americans trained long and hard for these missions as they not only mastered the technical aspects of living in space but also the social and psychological factors of living with men and women whose culture is vastly different from theirs. It was precisely during the stay of Americans on board Mir that the station attained a kind of comical notoriety in the world press. Some of it was indeed warranted. In February 1997, a devastating fire nearly went out of control in the station. Only the determination of the crew and a little bit of luck prevented a major disaster. Worse, in June of the same year a cargo spaceship rammed into the massive station, puncturing a hole in one of the modules. The crew, which included one American, would surely have died within minutes had it not been for some very quick action by the men on board to isolate the leak from the rest of the station. Unwittingly, the crew had to abandon the damaged part of the station which contained much valuable scientific gear. There were also many minor disruptions, ranging from problems with the life support systems, problems with leaking coolant, problems with communications, and problems with their master computer. Most tellingly, there were serious conflicts between Americans and Russians on board the station, encounters exacerbated by the psychological isolation of having to spend months at a time in a space that is as large as a three-bedroom apartment. At times, the news from Mir assumed an air of comic drama,

giving fodder for comedians all over the world. Having been designed only for a five year mission, after ten years in space, Mir was clearly breaking down and the Russians were barely managing to maintain operations.

Why were the Russians so reluctant to abandon Mir? In 1993, several major nations of the world, including Russia and the United States signed an agreement to build the so-called International Space Station (ISS), a massive conglomeration of spacecraft modules that will orbit the Earth in the next century. As with Mir, the ISS is supposed to host teams of men and women to allow humans to overcome the challenges of living in space. The Russian-American stays on board Mir

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The author is Director General of WWF International.

erated, including reports of assistant examiners on how candidates answered questions and how the standard compared with previous years' examinations. Scripts from previous years representing the quality of work associated with various grades are also considered to ensure the standards are the same year on year. The awarding teams are then in a position to identify a grade boundary. The grade boundaries are not released until later in the year, after the examinations have been taken and marked. They are published in the Chief Examiners Reports for the subject. The reports for all subjects are sent out to centres later in the year and are of particular interest to teachers who can use them as a guide for predicting the grades of next year's students.

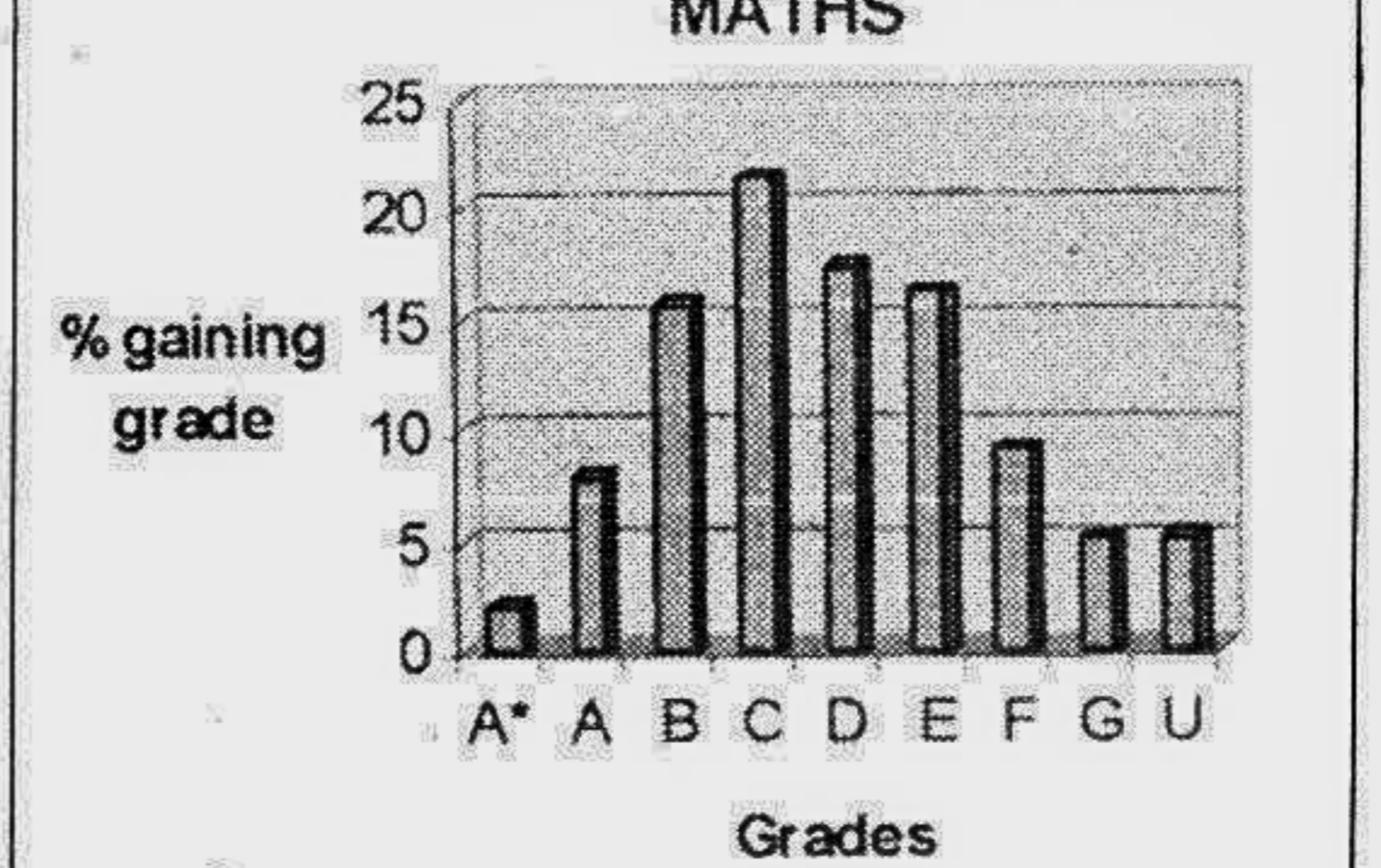
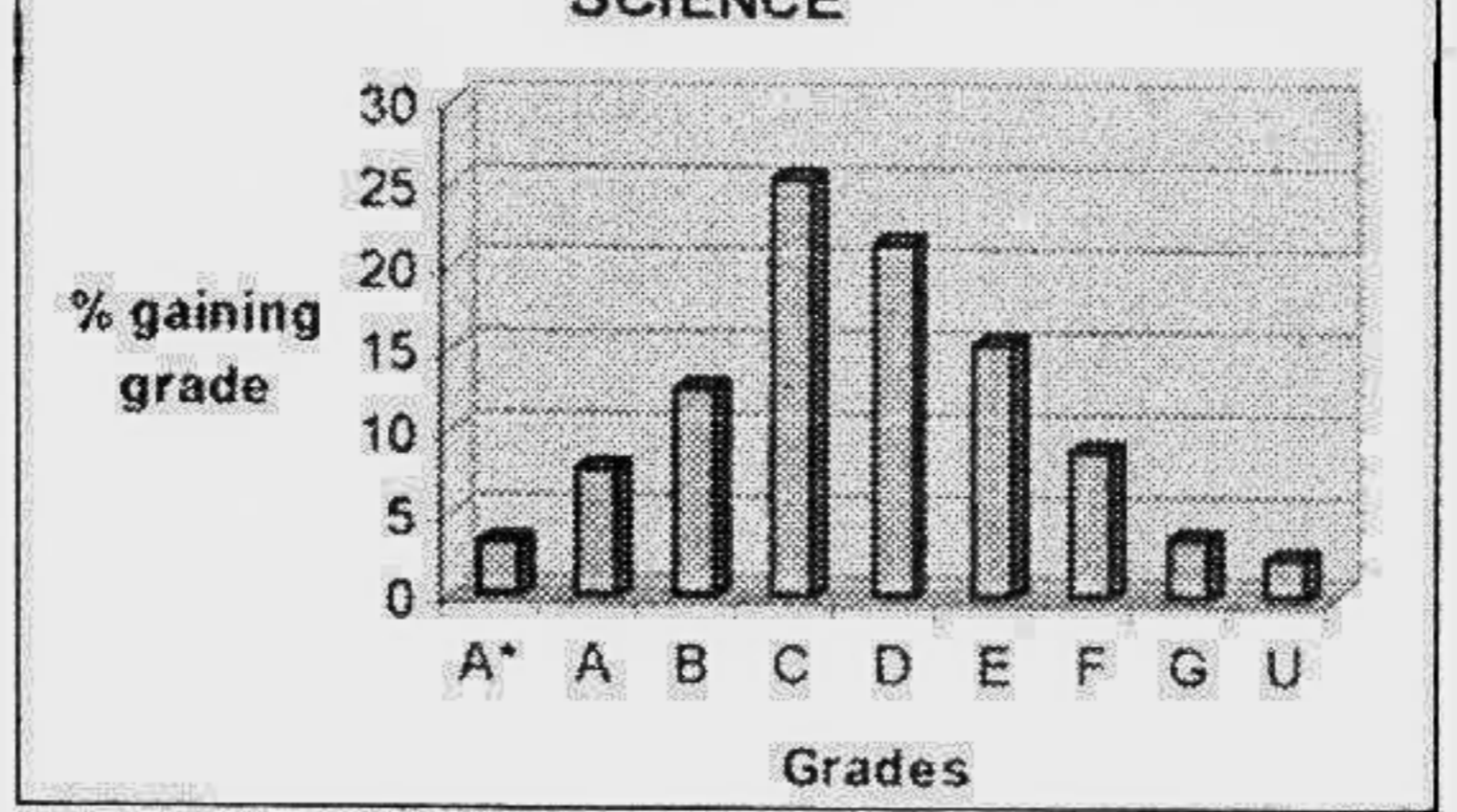
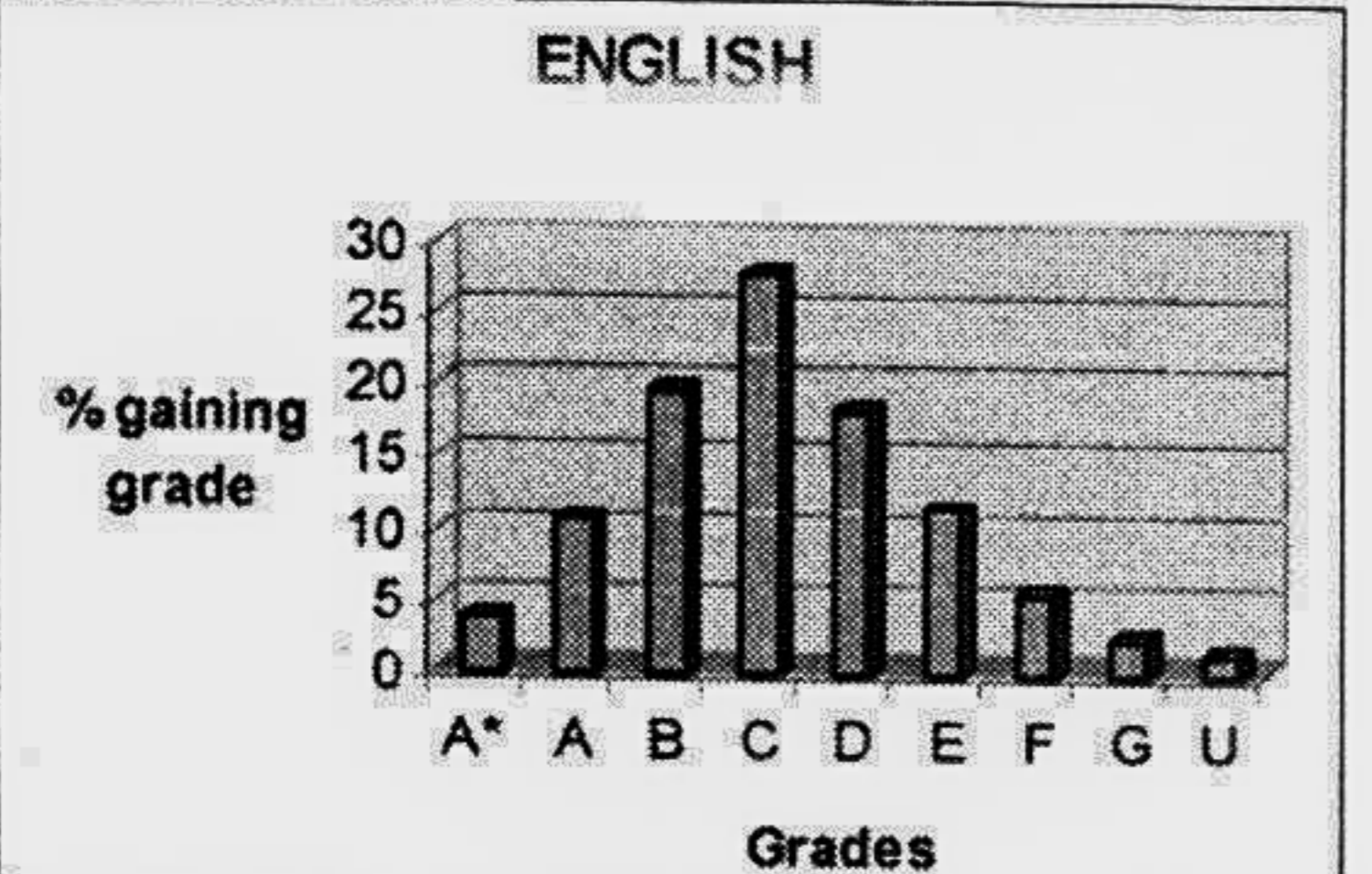
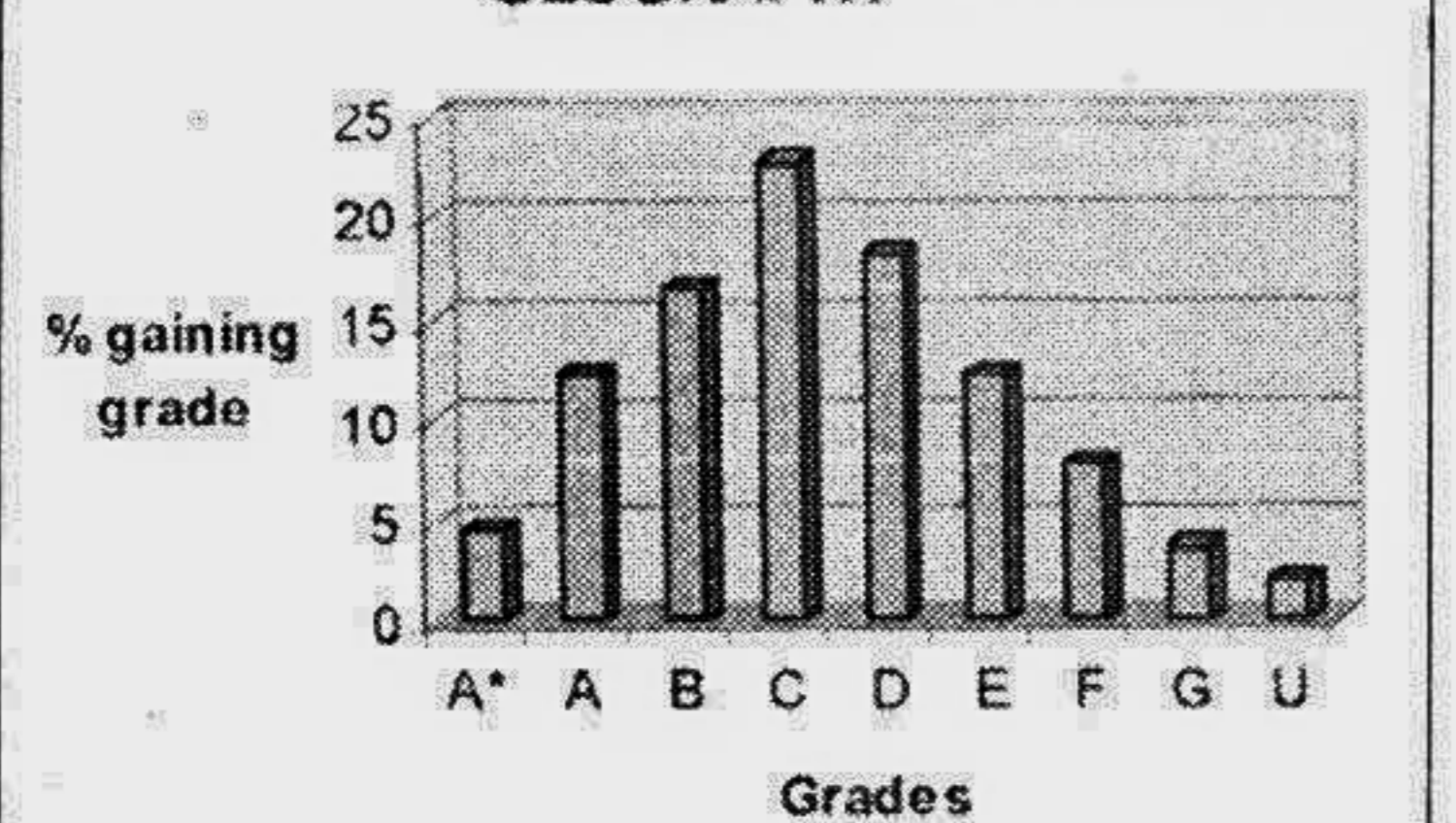
## New era in bilingual education

It is a truism that life is full of changes and there can be little doubt that the rate of change is accelerating. We have to adapt to the new order if we are to survive and so often — albeit begrudgingly — admit later that many of the changes we have seen in our lives have been for the better, writes **Shahwar Sadeque**

With the introduction of the International General Certificate of Education (IGCSE), nothing will change apart from the first big hurdle the children have to cross. Instead of taking O-level examinations, they will sit for the IGCSE.

There were a number of reasons why the GCSE examinations were developed and finally replaced the O-level examinations in England. But the principal reason was to enable the examinations to differentiate between a wider range of abilities. If parents and students are to understand the value of a particular grade, they need to be familiar with the grading system used for the IGCSE. And because the children are frequently in competition at an international level, parents need to know how the grades compare with standards achieved in other countries.

The IGCSE examinations will award nine different grades: A\*, A, B, C, D, E, F, G and U. All of these grades are passes apart from U which stands for unclassified. The A\* grade is awarded for exceptional achievement in the examination. The percentage pass mark gradually goes down from A\* to G. Therefore, if a student is awarded a D in a particular subject, this is a higher award than another student who was awarded an F in the same subject. However, in order to carry on with the A-level studies the students must have five or more GCSE at grades C and above as is the requirement in the UK.



Once familiar with the grades parents and students will frequently ask "What are the grade boundaries?" The simple answer is that they are

not cast in a tablet of stone. If an examination in a particular year turns out to have been more difficult or easier than the previous year, then this has to

be taken into account in drawing up the grade boundaries. Hence there may be some variation in the grade boundaries from year to year and from

subject to subject. Grade boundaries are set by members of the examining teams for each subject. A wide range of information is consid-

## Candles for Rain!

Can lighting candles induce the clouds into forming rain? That is the unique 'scientific solution' being employed by the state government in the dry Saurashtra region of western Gujrat, to bring forth much-needed rain, reports **India Abroad News Service**

**F**OR the past few days, every morning at 6 am and every night at 10 pm, nine-inch candles are lit atop the offices or quarters of the state Agriculture Department in the districts of Rajkot, Jamnagar, Amreli, Banskantha and Kutch. Department officials believe the silver iodide vapour that rises from the candles will reach the clouds, induce condensation and bring rain. Each candle contains about 80 grams of silver iodide as well as camphor and incense. The whole exercise is costing the department about Rs 2,000 (\$47) per day, in each district.

The vapour from these candles will take three to four hours to rise about 8 km into the sky, where the clouds are present. It is expected to increase the density of the small water droplets present in the clouds and result in rain," the department's deputy director for Rajkot, M.V. Vasoya, told the Indian Express newspaper. He stressed, "If such candles are lit at an interval of every 10 km in the district, it will result in a lot of rain."

This belief, however, is not shared by scientists. "Actually silver iodide can help in condensation of clouds by forming nuclei for smaller droplets to condense around, causing rain. But it's hard to accept that this can be made to happen by lighting silver iodide candles on the

ground," claimed R.K. Bakliwal, director of the Indian Meteorological Department, Ahmedabad.

According to K.N. Iyer of Saurashtra University's physics department, "This is a very unscientific and unconventional method of creating artificial rain. Vapour from 10 candles cannot be expected to reach 8 km in the sky and cause rain. You need to inject chemicals by aircraft for creating successful artificial rain." The scientists and even meteorologists say the scattered showers in the region over the last few days were natural and not induced by the candles.

The Agriculture Department believes burning the candles is a form of cloud seeding usually carried out by scattering silver iodide crystals on clouds from an aircraft. Seeding brings rain only if the clouds contain a certain percentage of water vapour and are of a particular density. But Gujarat Agriculture Minister Behcharbhai Bhadani is willing to give the candle experiment a good try. "I'm not sure whether the experiment has been successful or not for the rain could have been natural. I won't claim anything till we test the samples of rain water we have taken," he told the daily.