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

RENCH beans from Bang-Hladesh? Far-fetched as it I 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 vegeta-

bles and plants. Grown on the slopes of the Chittagong Hill Tracts and Comilla, these fruits and vegetables, along with flowers too, 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 momen-

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

N June, the Washington Post

published an article, later

Leirculated more widely in the

International Herald Tribune.

which for me drew attention to

a dangerous mood of indiffer-

ence in the United States to the

phenomenon of global warm-

ing. 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

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 rederal gov-

ernment from spending any

new money to curb greenhouse

gas emissions. Is there intelli-

gent life on earth? You some-

Knollenberg, but equally I have

anything but an intelligent

man. His Congressional

was first elected in 1992 and

highly educated in America.

Apparently a successful small

businessman before he began

Chamber of Commerce, the

National Association of

Now I know nothing of Mr

times have to wonder."

right at the end:

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 Bangladeshi climate. Proper technology would ensure a yearround 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 ex-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 pingapple cultivation. However, the European prefer small pineapples to the ones generally grown in Bangladesh. High



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

in this regard.

provides the necessary training

Hortex's efforts has shown

the way to commercially viable

private agricultural enterprise.

The success of the endeavour

has spurred the World Bank on

to take up yet another project by

extending its financial support

to Hortex by another three

tice is in Lalmatia, Dhaka. It is

here that the entire process

The Hortex Foundation of-

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

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

from cultivation to export is co-ordinated. In its promotion of for the government." The pincapples are harvested from the fields and the export of non-traditional packaged. Each package, bearitems. Hortex provides the proing the green and red emblem of ducers with free implements the Bangladesh flag, contains and service. eight pineapples. On average,

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 readymade 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.

End of the road for Mir

Few will take notice, but at the end of August this year, there will be something different about the world. Something that has remained the same for the past ten years will imperceptibly change: the permanent presence of humans in space will end, writes Asif Siddiqi

C INCE September 1989 Sthere has always been people in space. Any time of the day or night in the past ten years, you could look up and be assured that there was somebody in space. Their "living quarters" were, of course, the Russian Mir space

Launched in February 1986 in the waning days of the Cold War, the 20 metric tonne Mir (Russian for peace) was supposed to signal a new phase in the exploration of space by the now-defunct Soviet Union. It would be a permanently manned outpost in space where crews of two or three men (and in some cases women, too) spent six-month rotations. Roughly every half year, a new crew lifted off from the Baykonur Cosmodrome in the arid steppes of Kazakhstan and arrive at Mir. After a week or so, the old crew would return home, leaving Mir with the new one. It was a ritual that has been repeated ad nauseum through the last ten years. After initially hosting several crews in the late 1980s. the first permanent crew of two cosmonauts came aboard in

September of 1989. Through the years these "cosmonauts" have broken many records. In 1988, a team of three men became the first humans to continuously spend a year in space. A few years later in 1994-95, a trained medical professional, Valery Polyakov, spent almost a yearand-a-half in space. In an interview last year, Dr. Polyakov claimed that it was a record that would not be broken before the end of the century. He was right: it still remains the world record for time spent continuously in space. Of course, Mir was not built simply to break records. Through the years, sev-

eral modules with such eniggiving fodder for comedians all matic names as Kvant, Kvant-2. Spektr, and Priroda have been attached to the main core module in order to augment its capabilities for scientific research. This work has included experiments to develop new medicines and to create new semi-conductor materials for microchips. Crew have also spent time a vast amount of time studying the Earth's surface for use in agriculture, forestry, fishery and meteorology. Perhaps, the most impor-tant part of the scientific re-

search has been investigations

into the long-term effects of

weightlessness on the human

organism. This research will

have great relevance when

preparing for multi-year long

trips to planets such as Mars.

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 opera-Why were the Russians so re-

luctant 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 spaceship modules that will orbit the Earth in the next century. As with Mir, the ISS is supposed to host tours of men and women to allow humans to overcome the challenges of living in space. The Russian-American stays on board Mir

It was precisely during the stay of the 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.

Mir also has had its share of visitors. Cosmonauts from Syria, Afghanistan, France, Germany, Austria, Great Britain, Ślovakia, 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 more evaporation and rainfall and contributed to more depsychological factors of living structive storms that caused with men and women whose worldwide damage totalling \$ culture is vastly different from 92 billion last year. "Indeed," he 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 bed-room apartment. At times, the news from Mir as-

sumed an air of comic drama,

were meant to be "rehearsals" for the much longer stays on board ISS. As Russian economic troubles have mounted in the late 1990s, they have been increasingly unable to fulfil their commitments to ISS, naturally frustrating their many partners. In this climate, there were many in Russia who clung, perhaps unrealistically. to the idea of keeping Mir alive as a "safety net". Mir was after all the last symbol of great times for Russia. The ISS meanwhile was still on paper --- and in its design, the Russians have been increasingly forced to assume a subordinate role to the United States. Eventually, of course, money was the deciding factor. Unable to commit to both ISS and Mir, Russia had to make a tough decision. In early June, the Russian Space Agency decided to finally abandon Mir at the end of August 1999 in order to focus on commitments to the ISS. After the last crew leaves, controllers on the ground will slowly guide the 120-tonne behemoth to its flery death in the upper layers of the atmosphere sometime early next year. The Russians made the right decision. Although cosmonauts have been running Mir smoothly since its troubles in 1997, it is time to move on to a new step in space exploration. Much has been learned from Mir, but it is not time to put that experience to good news in a new more complex environment. Thus, although the permanent occupation of space will end sometime in August of this year, one anticipates that a new occupation will begin when the first crew comes on board the International Space Station sometime in the year 2000. It is quite likely that from that point on, in the history of humanity, there will never be a time when people are not in space. Mir will clearly have paved the way for that next step in space exploration.

The author is a NASA contract historian

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

Manufacturers and Federation of Independent seems the expertise and the in-Businesses. He sits on three committees of the House of Representatives, including the one that monitors the standards of official conduct. Mr Knollenberg, you might say, is reductions called for in the obviously a man of qualities.

Yet he is proud of the barrier he has placed in the way of reductions in carbon dioxide emissions by the world's greatno reason to suppose that he is est consumer of energy, which makes it an important source of greenhouse gases in the atmo-Internet pages tell me that he sphere. His Internet page notes: "Knollenberg is also recognized that his constituents are among the most ethnically diverse and as an expert on energy policy. He has been an outspoken opponent of the UN treaty on climate change. [he] secured lanhis political career, he has guage in the federal budget enpromoted economic growth and suring that the Clinton Administration does not imfree trade, an activity that has plement this treaty until it has earned him praise from the US been ratified by the Senate."

An intelligent man and an

the expert on energy policy, yet it telligence do not equate to reason. Mr Knollenberg sees only the claims — and they are merely claims — of the US energy industry that the emission

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

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

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

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 all do is take account of the swelling volume of evidence that something is wrong - for we ignore it at our

-WWF Feature

The author is Director General of WWF International.

EW parents in Bangladesh whose children are studying in bilingual

schools will have missed the present change taking place in the examinations children sit for. For many years the benchmark of a child's level of education at sixteen years of age has been their success in the Olevel examinations. Five good grades in O-level, followed by two or three in A-level usually secures them a place at a university of their choice. Frequently, the university of their choice is in America or Europe. in which case competition for places is at an international

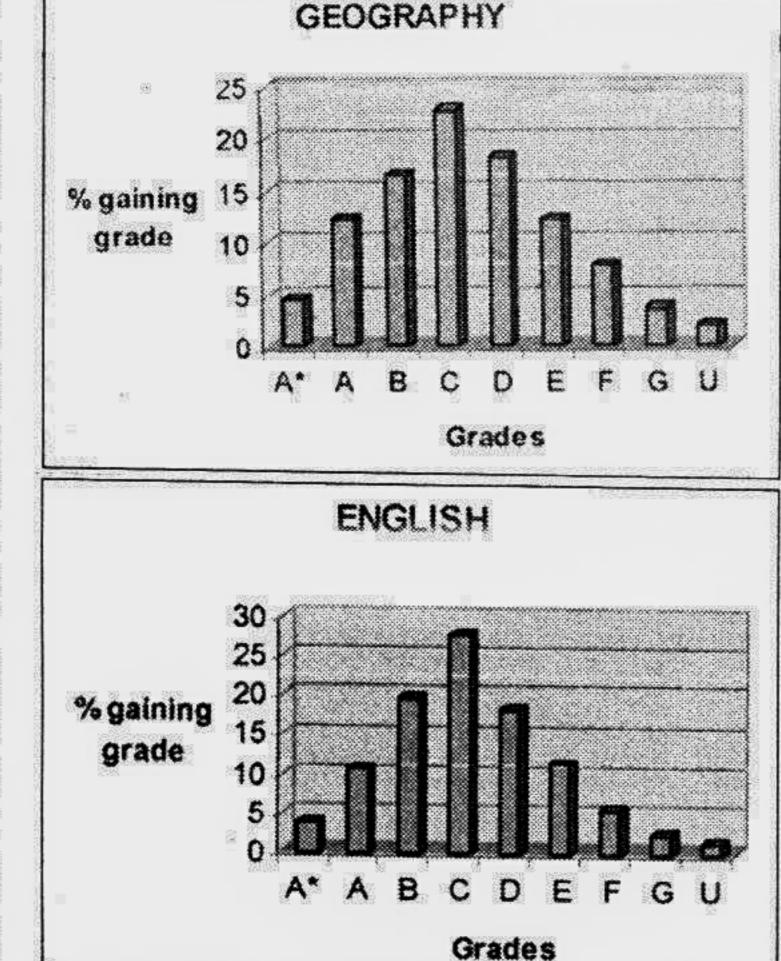
With the introduction of the International General Certificate of Education (IGCSE), nothing will change apart from the first big hurdle the children have to cross. Instead of taking O-level examinations, they will sit for the IGCSE.

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 exceptionally high 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.

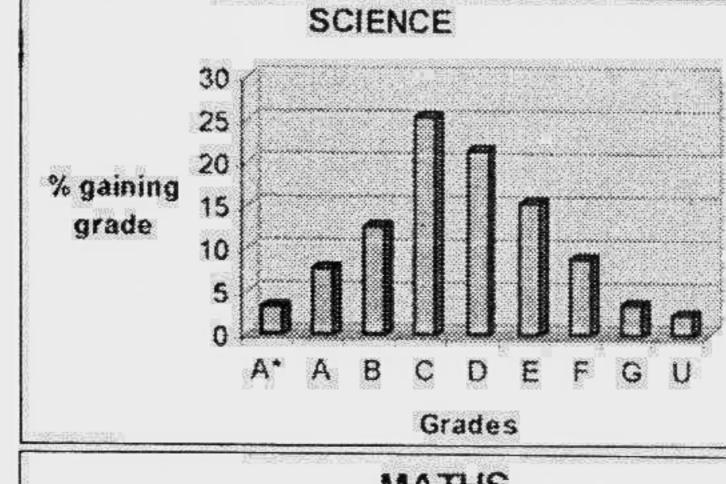
New era in bilingual education

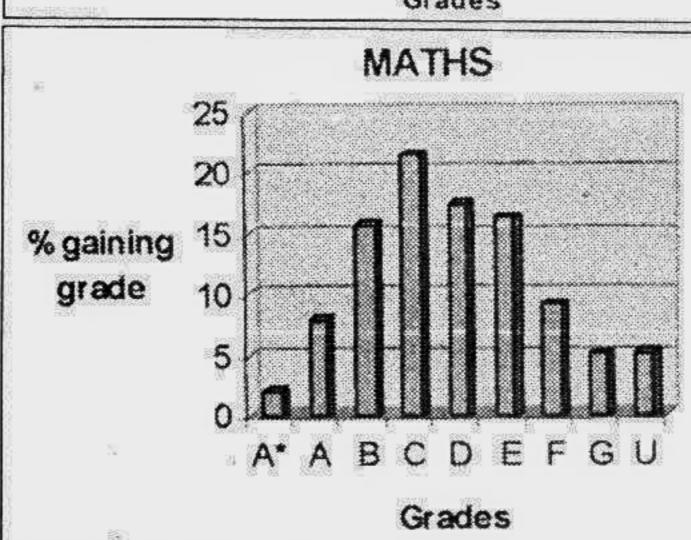
It is a truism that life is full of changes and there can be little doubt that the rate of change is accelerating. We have to adapt to the new order if we are to survive and so often — albeit begrudgingly — admit later that many of the changes we have seen in our lives have been for the better, writes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



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-

ered, 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.

We can get a good idea of standards if we look at the percentage of pupils gaining the range of grades from A* to U for the GCSE examinations in Mathematics, Science, English and Geography in Great Britain in 1998. As the graphs clearly show,

grade C is the grade most cornmonly achieved by students. It is the grades A* to C that tend to dictate a student's access into higher education. This is not to say that the grades D to G should be considered failures. They are pass grades but are generally not considered to be suitable for access into higher education.

So, if as parents we are looking at a prospective school for the children and we inquire about its academic record, we need to ask about the percentage of pupils who pass the IGCSE and the percentage that gain the grades A* to C. However, in our quest we must remember that a school is not just an examination factory; we need to ensure that the school we select provides a full rounded education for the children.

The author is an Educational and ICT Consultant and has taught O- and A-level Physics in a Grammar School and was a Member of the School Curriculum & Assessment Authority in the UK

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

morning at 6 am and every ▲ night at 10 pm, nine-inch chemicals candles are lit atop the offices or quarters of the state Agriculture Department in the districts of Rajkot, Jamnagar, Amreli, Banaskantha 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.

OR the past few days, every

"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, Ahmed-

According to K.N. Iver 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 metereologists 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