

Amartya Sen: Economist Extra-ordinary!

by Dr. M. Masum

Amartya Sen is the second Bengali to win a Nobel Prize. He is also a son of this soil. As a Bengali, I take a mighty pride which, I believe, most Bengalis do, in sharing the honour and glory bestowed on Amartya Sen by the world community.

Long live Amartya Sen.

FINALLY, Amartya Sen received Nobel Prize in Economics — an award long overdue. Back in 1971, when I was a student of M.Sc. in Economics at Islamabad University, Professor Naseem while introducing the topic 'Choice of Techniques' mentioned that the pioneering work in the field was done by Amartya Sen, a young Bengali economist. Even at that age he was recognized as the greatest economist east of Suez Canal. He still remains so being the first Asian to receive a Nobel Prize in Economics in 1998.

Born in Dhaka in 1933 and educated in Santiniketan, Presidency College and Cambridge University (where from he obtained his Ph.D. in Economics in 1959) Amartya Sen taught at Jadavpur University, Delhi School of Economics, London School of Economics, Oxford University and Harvard University. Early this year he moved to Cambridge. Since then he has been teaching at Trinity College where he had been a student four decades ago.

Mentioned earlier, he made pioneering contribution in the field of Choice of Techniques while he was a student at Cambridge. His genuine concern for economic development of the third world was demonstrated even at that young age when he chose choice of technique, a major problem confronting an underdeveloped economy attempting to have planned economic growth as his Ph.D. dissertation.

During the sixties most newly-independent countries accepted economic planning as the shortest route to prosperity. Projects being the building blocks of investment planning, appropriate guidelines needed to be developed for project appraisal/evaluation. Amartya Sen came forward here as well. For a long time UNIDO Guidelines, a joint product of Amartya Sen, Partha Dasgupta and Stephen Marglin, developed in the sixties dominated the scene of planning at project level.

Sixties were often recognized

as a decade of economic growth since many developing countries succeeded in achieving rates of growth considered fairly high by historical standards. However, the fruits of economic growth were not equitably distributed. The rich became richer and the poor poorer. The growing inequality in income distribution roused Sen's research interest in the areas of poverty and inequality. The outcome was a book, titled *On Economic Inequality*, published by Oxford University Press in 1973. It is interesting to note that he dedicated the book to his daughters with the following words:

To Antara and Nandana
With the hope that when they grow up
They will find less of it no matter how they measure it.

How to address the issues of poverty and inequality? What should be the best strategy to promote growth with equity? Amartya Sen considered promotion of productive employment to be the most effective means to achieve the above objectives. In his book, *Employment, Technology and Development*, published by Oxford University Press in 1995, he highlighted the multiple dimensions of employment and explored the inter-relationships between institutions, technology and employment with a view to formulating an effective employment policy.

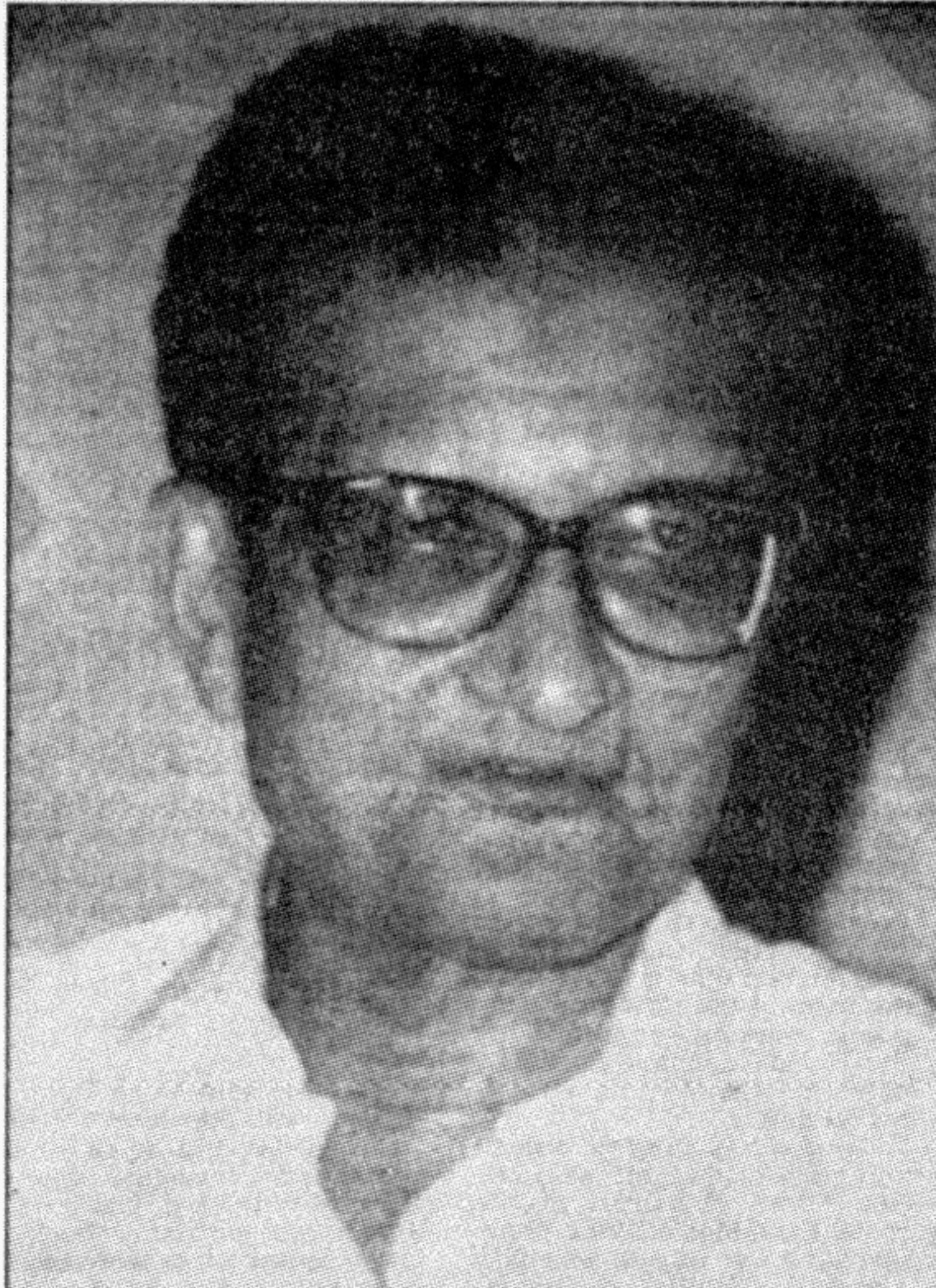
Famines, the Bangladesh famine of 1974 in particular, drew Sen's attention in explaining why famines occur. In his book, *Poverty and Famines: An Essay on Entitlement and Deprivation*, published in 1981, Sen pointed out that in the twentieth century famines happened even when overall supply of food was higher than average and improving; and solution to the riddle he found by developing the notion of entitlement defined as command over alternative commodity bundles and analyzing circumstances which may cause entitlement failures for different socio-economic groups resulting in

famines. "A person has to starve if his entitlement set does not include any commodity bundle with enough food. A person is reduced to starvation if some change either in his endowment (e.g. alienation of land or loss of labour power due to ill health) or in his exchange entitlement mapping (e.g. fall in wages, rise in food prices, loss of employment, drop in the price of the good he produces and sells), makes it no longer possible for him to acquire any commodity bundle with enough food." (Sen; "Food, Economics and Entitlements" in Dr. Ze. Sen and Hussain eds. *The Political Economy of Hunger*, UPL, 1995, p.55) Sen's above analytical contribution served as the basis for many social safety net programmes that saved the poorest of the poor from starvation.

In his famous Economic Journal article of 1983, "Development Which Way Now?" Sen critically looked at the concept of development and guided evolution of the discipline of Development Economics to make it more humane i.e. people-centred — human development receiving priority attention.

Though the citation for the award of Nobel Prize highlighted Sen's contribution to Welfare Economics and Analysis of Poverty and Famines, there exist very few areas in Economics that did not enrich from Sen's contribution. Besides Development Economics, Growth Economics, Capital Theory, Agricultural Economics — virtually every branch of Economics immensely benefited from Sen's golden touch. Mentioned earlier, in certain areas Sen played a pioneering role.

Amartya Sen has not only been a great researcher expanding the horizon of knowledge, he has been a great teacher disseminating knowledge as well. When I went to Delhi School of Economics in 1973 for my Ph.D. he had already left and this I considered a great misfortune for myself. Subsequently, however, when I went to Oxford



In 1983 as a Commonwealth Academic Staff Fellow, I was fortunate enough to have the opportunity of attending a course on Welfare Economics, offered by Professor Sen. It was the most popular course at Oxford at that time attended, besides students, by a large number of faculty members. He was indeed a fantastic teacher, the best I have ever come across.

Very few economists possess the rare quality of presenting highly technical subjects in a simple, lucid and attractive manner as done by Sen. Sen's writings are therefore easier to access. To give an example, Sen highlights some debates in Capital Theory, a highly complicated subject through an enlightened conversation between the Venerable Subhuti and Lord Buddha. Sen also tries to reach a larger audience by writing popular books and articles in

Bangla. A few of his articles were published in the *Desh*. Anyone who came in touch with Amartya Sen will always remember him as a fascinating personality — warm, hospitable and easily approachable. I fondly remember a few occasions of meeting and sharing views with him at his office at the Institute of Economics and Statistics and at Queen Elizabeth House where I worked.

Amartya Sen is the second Bengali to win a Nobel Prize. He is also a son of this soil. As a Bengali, I take a mighty pride which, I believe, most Bengalis do, in sharing the honour and glory bestowed on Amartya Sen by the world community. Long live Amartya Sen.

The author is Professor of Economics, Jahangirnagar University.

When the Economics of Welfare are a Nobel Proposition

by Paranjoy Guha Thakurta

Whereas Sen's name was short-listed for the Nobel Prize in Economics on a number of occasions, the prize seemed to elude him each time. His admirers argued that economics in today's world had become a dry, number-crunching social sciences and Sen's perception of economics, with all its philosophical and ethical dimensions, had not been fully appreciated by many. Now that wrong has been corrected.

HE is known best for elevating the "dismal", mathematical and business-oriented social science of economics to the realms of philosophy, by expounding on its ethical dimensions. The 64-year-old Amartya Kumar Sen, who has won the 1998 Nobel Prize for Economics, was born two decades after fellow Bengali Rabindranath Tagore became the first Indian to receive the Nobel Prize.

Coincidentally, Sen was born on November 3, 1933, in Shantiniketan, the small village in eastern India, which was founded by Tagore in 1901 as a centre of learning. The similarities do not end there. Tagore was more than an author, poet, dramatist, songwriter and artist; he was also considered a philosopher. Sen, too, has earned the status of an "economic philosopher" for his extensive work in welfare economics, especially studies of famine in Bangladesh, India and Saharan Africa as well as on poverty worldwide.

It is said that it was this status that influenced the decision taken in July 1997 to appoint him the first Indian to head an academic institution in Britain, namely, the Trinity College in Cambridge University. This was, of course, not the first time that the British had honoured Sen, who had completed his doctorate in economics from Cambridge University in 1954 at the amazingly young age of 21. That year, the university awarded him the prestigious Adam Smith Prize named after the noted British political economist.

What came thereafter was a series of academic assignments: professor of economics at Jadavpur University in Calcutta (1956-57), Fellow, Trinity College, Cambridge (1957-63), professor at the Delhi School of Economics (1963-71), then at the London School of Economics (1971-77) and subsequently at Oxford University

(1977-80). In 1980, he became Drummond Professor of political economy at Oxford University.

In between these teaching assignments, Sen held a number of honorary positions such as Director, Agricultural Economics Research Centre, University of Delhi. He was also a visiting professor at the Massachusetts Institute of Technology (MIT), Harvard University, University of California, Berkeley, and Cornell University. He was also made an honorary member of the American Academy of Arts and Sciences.

Sen has received honorary doctorates from a host of universities like the Visva Bharati University at his birth-place, Shantiniketan, the University of Saskatchewan and the Universities of Delhi, Essex and Bath. He was also an honorary fellow at the Institute of Social Studies, Hague, Switzerland.

Sen's first book, a slim volume called "Choice of Technique" quickly became a standard textbook for undergraduate and post-graduate students of economics the world over. The books that followed — "Growth Economics", "Collective Choice and Social Welfare", "On Economic Inequality" and "Employment, Technology and Development" — concentrated on mainstream economics, but his interest in social welfare issues was already apparent.

His publication "Poverty and Famines: An Essay on Entitlement and Deprivation" broke new ground in the sense that it challenged the conventional wisdom that food shortages were the most important explanation for famines. Examining in great detail the famine in Bangladesh, Sen argued that a fall in real income and absence of entitlements were significant causal factors for famines, and not just a drop in food supplies or agricultural production.

The Royal Swedish Academy of Sciences has stated in its citation that Sen was being awarded the Nobel Prize for

Economics for his "contribution to welfare economics, which have helped in the understanding of economic mechanisms underlying famines and poverty". In recent years, most of Sen's work has focused on health and education. Sen was never one of those economists who was feted and lauded by the Indian government. In the 1950s, he had questioned the wisdom of the so-called Mahalanobis model of development, which emphasised centralised planning and the establishment of heavy industries.

More recently, he has not minced words while criticising the Indian government for failing to alleviate poverty, for not doing enough to reduce the incidence of ignorance and for not being able to provide basic health-care facilities to the majority of the population. In an interview with this correspondent in August 1997, Sen remarked that India had, in a sense, taken the worst of capitalism and the worst of socialism.

Capitalist societies had prompted the virtues of entrepreneurship, which India's bureaucracy had stifled. In other words, what was common to China, Cuba, Vietnam and the former Soviet Union, was that all these countries had sought to provide basic health-care and educational facilities to their people. In this context, India had received the worst of both worlds, he felt.

Whereas Sen's name was short-listed for the Nobel Prize in Economics on a number of occasions, the prize seemed to elude him each time. His admirers argued that economics in today's world had become a dry, number-crunching social sciences and Sen's perception of economics, with all its philosophical and ethical dimensions, had not been fully appreciated by many. Now that wrong has been corrected.

— India Abroad News Service

Agroindustrial Project Analysis: The Marketing Plan

by ABMS Zahur

Consideration of the marketing factor is vital to project analysis. Usually a firm's substantial efforts and investments are put into mounting procurement and processing operations only to have the expected benefits never materialise because of an inadequate marketing analysis.

LIKE many other developing countries after industrial projects fail due to mismatch of production and marketing in Bangladesh. As agroindustrial feasibility testing consumes significant time and resources it is economical to identify market needs first. Furthermore, a market analysis can identify a product need that is agronomically feasible but has not been considered. Agroindustrial products differ from other products in the unique characteristics of their raw materials, in their frequent status as necessities. Consequently they differ from the marketing of nonagroindustrial goods. As a necessity they often attract political attention to, and government control of, prices, quality and distribution. One of the most important primary elements which is considered in the marketing analysis of an agroindustrial project is the marketing plan which defines elements of product design, pricing, distribution and promotion.

A marketing plan aims at placing the firm's product most advantageously in relation to its consumers and competitors. Most products have several design options. The product should be designed by the project's marketing and production personnel because marketing identifies the needs for production's designs. When the final

design adjustments have been made, full-scale production and marketing begins. Market research should continue throughout the life of the product so that the product's design can be modified to fit consumers' changing needs. Pricing strategy should be chosen according to the competitive environment and market segment. Among the pricing strategies the most common are cost-plus pricing, penetration pricing, predatory or preemptive pricing, loss-leader pricing, skimming, price leadership, administered pricing, controlled or subsidised prices and market prices.

In cost-plus pricing, the firm adds a margin to its cost for nonmanufacturing costs and profit. A more refined approach is to calculate a mark up that will generate a selected return on investment at an expected sales volume. Penetration pricing is the setting of prices at level lower than the competitor's in order to enter the existing market. It is used to overcome barriers to market entry or to reach a market segment that would be excluded at higher prices. This strategy is intended to capture a larger market share and establish a firm market position. Predatory pricing is an aggressive approach that underprices existing competitors to erode their market position severely. Preemptive pricing

underprices the product to prevent new firms from entering the market. The loss-leader strategy prices a below cost to attract consumers in the hope that they will purchase other products in a company's line. Skimming sets high prices to attract the price insensitive segment of the market.

Prices are administered in regulated industries or industries with cartels. However, such attempts fail in case of large number of producers, less essential products and existence of substitute products. In case of staple food products governments often institute price controls to eliminate management's influence over the price variable. The forces of supply and demand in the market set prices for most agroindustrial commodities. To reduce some of the uncertainty of market-price variability, some firms initiate contracts either fixed or tied to future-market prices. It would be advisable to keep the pricing strategy flexible enough to be able to meet changing market conditions. Products are usually promoted through providing product information to use

in buying decision. The primary task in formulating the promotional strategy are deciding whom to reach, what to say, and how to say it. Promotion directed toward the end user is a critical component in a "pull" strategy to stimulate consumer demand.

Promotion can also be directed at wholesale and retail distributors in a "push" strategy by which the firm attempts to convince distributors of the product's advantages. Promotional strategies should be designed to avoid adversely affecting low-income groups. The influence of a firm's promotion on a country's economic development depends on factors such as wealth of people, degree of commercial differentiation in products, extent of primary versus secondary demand, and luxury nature of the goods. The promotional message should be derived from an evaluation of consumer informational needs and the analysis of the competitive market. Some promotion is intended simply to stimulate primary demand for a category of products, especially when the product is new or there is little

other advertising. It is often difficult for agroindustries to differentiate their products, particularly when the processing is minor. However, agroindustries have achieved product differentiation by instituting rigorous quality control programmes.

Distribution links the processor to the marketplace. Its structure can be described by the length of its channels i.e. the number of intermediaries between the manufacturer and the consumer. It can also be described by the nature of the institution operating it. Many functions are to be performed to move the product from the processor to the consumer. The intermediary functions and services must be performed regardless of whether the system is free market or centrally planned. Some additional functions and actors are involved in export marketing.

Transport is a major factor when the product is perishable. Investment in modernising wholesaling facilities for fresh produce such as fruits, vegetables, grains and meat is highly desirable because it reduces waste, preserves product quality, shortens the length of the distribution channel, and increases transport and handling efficiencies. Success of modern facilities, however, depends on ensuring the patronage of buy-

ers and sellers. A further motive for analysing the distribution system's structure and functions is to locate the system's controlling force. The locus of power is often indicated by structural concentration. If structural concentration occurs the power lies with few because many organisations are dependent on them. Power may also be derived by controlling a central function such as storage or transport. The processor may consider forward integration if the distribution system's power is highly concentrated. Integration can be precluded if the government has introduced a marketing board as a monopsonic wholesaler. Marketing boards serve numerous functions, including the provision of technical assistance, promotion of products or plans, quality control, price stabilisation and the provision of infrastructure. Forward vertical integration is also difficult because of the strength of distributor-retailer relations.

If existing distribution channels are used an analyst must choose wholesalers and retailers. Wholesalers may be selected according to cost, quality, dependability and control. Retail outlets must reflect the product, the market segment, and the prospective consumers buying process. In all cases,

however, the analyst should review the proposed distribution system to ensure an appropriate product-distribution fit.

The elements of marketing mix should be designed to be internally consistent and mutually reinforcing. The marketing mix for a particular product must relate to the company's entire line so that sales will not be diverted from another of the company's products. If sales are diverted an individual product may appear highly successful without significantly benefiting the company as a whole. Sometimes the marketing mix can be adjusted so that consumers will remain with the company. The marketing approach must also be related to a company's financial, organisational, production and procurement operations. The integration of the marketing components into an internally consistent whole that is compatible with the company's product line and the other managerial functions constitutes the marketing plan. Based on the enterprise's marketing objectives, it should guide the project through the competitive market environment.

The marketing plan should be an integral part of all project proposals. In reviewing the project the analyst may consider the questions such as (a) was the product adequately designed? (b) was the appropriate pricing strategy adopted? (c) was the right promotional strategy, formulated? (d) was the distribution system effectively linked manufacturer to the market place? (e) are elements

of marketing mix integrated in a viable marketing plan?

Consideration of the marketing factor is vital to project analysis. Usually a firm's substantial efforts and investments are put into mounting procurement and processing operations only to have the expected benefits never materialise because of an inadequate marketing analysis. Because projects enter preexisting markets, it is essential that firms know the market environment. Market analysis should, therefore, examine consumer and competitors. From analysis of the consumers and competition, a firm formulates its project's marketing plan. The plan should ensure that the project's marketing strategy, for product design, pricing, promotion, and distribution. The elements of the marketing mix should be integrated in a comprehensive strategy to place the product in an optimal marketing position relative to the consumers' needs and competing products. The plan should also consider the rest of the company's product line as well as the company's organisational, financial, production and procurement operations to ensure the cohesion of the project's strategy. Once a marketing plan is adopted, the firm should anticipate the competitive reaction and formulate a response that will maintain the project's viability in a dynamic market environment.

The author is retired Joint Secretary, Government of Bangladesh.

Two-year Weather Forecasts are on the Way

The huge cost in lives and damage of hurricanes like the one called Georges that has just devastated part of the Caribbean and Florida may be alleviated as a result of a massive scheme to integrate weather monitoring schemes. The result should make it possible to forecast weather patterns two years in advance. Thomas Land writes from Geneva

A sea observation programme that can predict the behaviour of entire oceans is being put into operation.

The \$4 billion-dollar-a-year scheme will substantially cut the cost of weather-related natural disasters such as the hurricane that has just devastated part of the North Caribbean region.

The plan is to integrate several hitherto isolated weather monitoring systems into a single network. It should produce reliable routing weather forecasts for up to two years in advance.

The United Nations-sponsored programme, to be known as Global Ocean Observation System (GOOS), will create a national oceanographic service in every coastal country and digest and redistribute the resulting data.

Very long-term weather forecasting soon to be made accessible through fast new computer and improved electronic observation techniques will offer enormous advantages to virtually all spheres of human endeavour.

The work takes advantage of new computer modelling techniques achieved in studies of El Niño, the oceanic and atmospheric phenomenon that periodically triggers a climatic up-

heaval dominating the global weather. Such a period is just now coming to an end.

The programme, coordinated by the UN International Oceanic Commission (IOC), already provides reasonably accurate weather forecasts in certain areas covering several months. It has enabled the emergency services to prepare well in advance for storms, floods and drought.

Now it will be expanded by armadas of new robot sensors across notoriously under-observed, hurricane-prone areas such as the Pacific, making reliable two-year weather forecasts a routine reality.

Many of these "smart" sensors, ranging from automatic submarines to moored and drifting buoys and laboratories on the ocean floor, are being deployed during 1998, the UN International Year of the Ocean.

The GOOS network will pull together organisations that manage 300 tide gauges around the world, an array of buoys in the equatorial Pacific and 22 European agencies in the Baltic, Arctic, Mediterranean, Black Sea, North Sea and Atlantic.

Ocean modelling should greatly assist humanity to face future developments in the climate. The issue is crucial be-

cause the changes due to global warming are by their nature not reflected in the climate record, a traditional forecasting tool.

The "smart" sensors will communicate with weather centres via satellites. They will collect detailed data on temperatures, winds and barometric pressure for computer models that predict the formation and behaviour of hurricanes.

Weather satellites do identify and plot the course of hurricanes, but they cannot collect the data essential for forecasting.

When fully operational, the GOOS observation system will substantially moderate the cost of weather disasters by providing ample warning, says George Neelzer, a marine scientist involved in the programme at Canada's Bedford Institute of Oceanography.

The \$4 billion cost will be raised by governments and the industries it is likely to serve. Scientists see it as a highly profitable investment.

For example, predicting the height of waves or the strength of currents will save large capital investments in the design of structures for offshore oil and gas production.

Such structures have a planned lifetime and a realistic assessment of the conditions which they must withstand

would save costs without compromising safety standards. The saving of one metre of oil rig leg, corresponding to one metre in design wave height, could save more than \$2 million.

Similar calculations are used in the design and costing of harbour defences, jetties and bridges. Sea climate data also has widespread use in operations such as towering large structures over long distances, the planning of sensitive cargo transport, the installation of maritime structures and dredging.

The new forecasting technique should enable specialists to provide at least a few months' notice of increased risk of climate-related disasters, such as a poor south-west monsoon in India, drought in Africa, Indonesia or the Brazilian Amazon, or serious flooding in Peru or Ecuador.

Advance information on seasonal climate fluctuation should make for more efficient distribution of fertiliser or food relief. Building projects could be time to avoid flooding.

The work holds great hope for the future.

— Gemini News
The writer writes from Geneva on UN and international affairs.

Red-tape Inefficiency Hampers UN Operations.

Thalif Deen writes from New York

THE United Nations Secretariat, vilified by many critics as a sprawling bureaucracy, spends an average of 461 days to hire just one single staff member.

The world body, whose administrative costs far outweigh its delivery costs, spends an average of 75 cents of every dollar on its staff.

"The inefficiency of a great deal of administrative activity in the United Nations is perhaps the main impediment to efficiency in its substantive work and operations," says Under-Secretary-General Karl Paschke, head of the Office for Internal Oversight Services (OIOS).

In his soon-to-be-released 1998 annual report, a copy of which was obtained by IPS, Paschke says the laborious recruitment process came to light only after his first audit of the organisation's notorious hiring practices.

Currently, the UN Secretariat has a staff of more than 8,000 while the total number of employees in the UN system worldwide, including the World Bank and the International Monetary Fund (IMF), is estimated at more than 31,000.

"It was only after this audit was conducted that the average time taken to recruit a new staff member (461 days) became known, although the frustration of managers with the time and effort needed to recruit a

new staff member had been widespread in the United Nations for decades," he adds.

While recognizing attempts to streamline and re-engineer recruitment, the audit showed that "the process lacked transparency and was cumbersome and time-consuming."

The study says that the challenge for managers over the next few years in a reform-conscious organisation will be to conduct similar analyses for each key administrative process so that they can derive a realistic understanding of current performance.

According to the study: — an average of 37.5 days are spent on the classification of a new post.

— 44.6 days on the preparation of vacancy announcement, 30.7 days on circulation of the announcement.

— 19.3 days on screening of curriculum vitae.

— 120.6 days on a review by substantive department.

— 86.9 days on presentation to appointment body, 63.7 days for a review by appointment body.

— 21.2 days for review and approval of recommendation of appointment body and 35.9 days for approval to entry on duty.

Total : 460.5 days!

The OIOS audit also found deficiencies in the recruitment

process, including inadequate methods for identifying qualified candidates, inefficient employment clearances, and inadequate delegation of human resources management authority.

A senior UN official recently complained how difficult it was to get qualified personnel for vacant jobs in his office. Most applications have to be processed through the department of personnel and also overcome the 461-days waiting period. "After all the waiting, I still wasn't able to get the most qualified candidate I wanted," he said.

"Cronyism, nepotism, politics — and geographical representation — have continued to play a significant role in UN hiring practices outweighing, in most instances, merit," he said.

Asked about political interference, Rafiah Salim, Assistant Secretary-General for Human Resources Management, admits the high degree of political power play in the UN system.

"That is something I believe member states themselves have to decide whether this should stop or this should not stop. It is impossible for people like me or any individuals as an individual or even as a small group in the United Nations to try and stop a practice that has been going on, I think, ever since the

United Nations was born," she points out.

A staffer, with a Bachelor of Arts and Master of Arts Degree in Fine Arts, was recently hired as a procurement officer and while a Legal Secretary was promoted to a higher ranking job to supervise mail room operations.

"There are scores of bad appointments in the UN system," one staffer told IPS. "Some of the jobs are tailor-made for selected candidates — and most of the vacancies are advertised even while the candidates have already been pre-selected for the job."

As a result of the malpractices in the system, some of the long-standing and skilled staffers are leaving the organisation, he said.

"I recently learned of a disturbing trend," UN Secretary-General Kofi Annan said last month. "For the first time in UN history we are seeing more resignations than retirements."

"It is as if, having glimpsed the future, those people had decided to try their luck elsewhere," he said.

— IPS/APF