2nd ICA-JAPAN TRAINING COURSE
ON
ENHANCEMENT OF FARMERS' INCOME &
POVERTY REDUCTION THROUGH COOPERATIVES

January-February 2008

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Session	Topics
IACBM 7	Cooperatives and Contract Farming
IACBM 8	Mahagrapes
MM 11	Strategic Food Marketing
MM 12	WTO and Agreement on Agriculture

Cooperatives and Contract Farming*

The value of commerce in processed foods exceeds that of basic agricultural commodities by several magnitudes. Though bulk of this trade takes place in developed countries and dominated by a few multi national firms the demand for processed food in the developing countries is increasing in recent years due to rapid urbanization and changing lifestyles. The growth of agro-processing has a big potential to trigger development in other sectors of the economy through multiplier effect. It can create jobs away from farms and processing units in sectors like transportation, distribution, retailing etc. Apart from the forward linkages such as processing and marketing, agro-industries help to create backward linkages by supplying credit, input and other services to primary producers.

The success of a processing firm depends on its ability to manage the supply of raw materials to meet its customer requirement. However, the quality attributes of a product demanded by the customer have been increasing in complexity. From storability and prolongation of shelf life to nutritional standards to flavour to convenience and to health promoting nature the quality attributes are constantly evolving. Apart from the intrinsic qualities such as flavour, texture, appearance, shelf life and nutritional value extrinsic factors that is the production system such as pesticide used, genetically modified organisms, processing methods, packaging etc contributes to the quality demands of the consumer.

As the food system moves toward greater specialization and segregation of agricultural commodities more coordination is required between the processor and the producer that is the farmer. Since cooperatives are user owned organization it is reasonable to assume that they are in a better position to contract with the producers compared to investor owned firms (IOF). The emerging consumption habits provide a unique opportunity for the cooperatives to invest in processing and marketing activities which would help to augment the member farmer's income. However, the trend in India and elsewhere points to the contrary, more and more IOF are entering into contract arrangements with the farmers compared to the co-operatives.

The paper highlights the advantages and constraints facing a cooperative organization from getting into more value added services and how the New Generation Cooperatives are overcoming these constraints.

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* Note prepared by Prof. S.R.Asokan for discussion.

Contract Farming

There is an information asymmetry between the consumer and the producer in the open market operation. Price is the only coordinating mechanism between them but it is not enough to convey consumer expectations such as quality to the farmers. This has necessitated the processing firms to step in. They enter into an agreement with the farmers for producing the crops according to their specification at a pre-negotiated price. Contract farming is a "form of vertical coordination between growers and buyer processors that directly shape production decisions through contractually specifying market obligations such as value, volume, quality and at times price, provide specific inputs and exercise some control at the point of production." The firm is able to get the desired raw material under the arrangement and the farmer benefits to the extent that the market risk is transferred to the firm while the production risks remain with them. One major shortcoming of any contractual arrangement is the opportunistic behaviour of one party or the other. Contract farming is no exception.

Opportunistic behaviour occurs when an individual, organization or institutions take advantage of the power they possess in a contract setting and fail to honour their commitment. The lack of alternative uses for an asset increases the threat of potential exploitation by other players. If the open market price for the crop goes up farmers tend to divert the crop to the market away from the contract. Similarly, when the market price crash below the contract price firms may refuse the crops on one pretext or the other. The relationship between an IOF and its suppliers that is farmers can be characterized as a zero sum game. Any increase in payments to inputs is a decrease in residual income for investors. The IOF has no inherent interest in the welfare of the input suppliers. Because of the zero sum nature of the IOF supplier relationship there is an inherent distrust between them.

In case of the cooperatives, the relationship is not a zero sum game. A higher price to inputs represents an equivalent payment to investors; the residual income is simply paid in the form of higher prices to the farmers. Given their producer owned and producer governed nature, cooperatives have an inherent producer orientation. Why then contract farming by IOF are increasing in many countries whereas cooperatives are not in a position to invest in value addition such as processing and marketing in many agricultural commodities. The plausible explanation could be that the design of traditional agricultural cooperatives creates certain constraints which inhibit them in taking up such ventures.

Cooperatives

The traditional cooperative structure is user owned, user controlled and user benefited in addition to having the following organizational attributes: ownership rights are restricted to member patrons: residual return rights are non-transferable, unappreciable and redeemable and the user benefits are distributed to members in proportion to patronage but investment may not be proportional to patronage.

Communicating information regarding the characteristics of agricultural products and the preferences of the final consumer is the key to matching supply and demand. Co-operatives have the potential to exploit information more efficiently than other forms of vertically integrated firms for two reasons. First, both members and cooperative firms face a greater incentive to gather and transmit information. Co-operative members have more incentive to track and communicate product characteristics to an enterprise in which they have an ownership stake and a claim on residual earnings.

Co-operative firms have a greater incentive to acquire information regarding the consumer preference since their investors: the producer will capture the benefits that accrue from such research. However, that information regarding market preferences for product characteristics may not be exploited by cooperatives.

A number of factors have been suggested as explanations as to why cooperatives have not been successful in integrating forward into high margin, value added activities to a greater degree. Most of these explanations are related to the fundamental characteristics of cooperative ownership, capitalization and governance that distinguish cooperatives from other business forms.

Equity Capital

Co-operatives are user owned organization. But ownership per se conveys no benefit instead benefit is obtained when members patronize the cooperatives. The result is that members have no incentive to invest in the cooperative even though investment is critical to the cooperative's success. Because of the limited incentive for direct investment and as a means of maintaining patron ownership and control, secondary markets for liquidating cooperative equities generally do not exist. The absence of such a market precludes participation by non patron investors who are willing to accept risks for the opportunity for high returns who are able to spread their risks by diversifying their individual portfolios. Patrons must rely on the cooperative to eventually redeem equities in cash

usually at the discretion of the board of directors and according to the organization's financial condition.

Whereas other firms can raise additional equity by selling stock to the general public, a cooperative must rely almost exclusively on its patrons and internally generated funds to increase its equity base. Patrons derive benefits from the cooperative solely through patronage they have an incentive to under finance the cooperative by increasing their patronage relative to their investments. Patrons may be reluctant to finance long term investments that are expected to generate benefits after they retire. This gives rise to horizon problem.

Horizon Problem

The horizon problem occurs when a member's residual claim on the net income generated by an asset is shorter than the productive life of that asset. This problem is caused by restrictions on transferability of residual claimant rights as the lack of liquidity through a secondary market for the transfer of such rights.

As a cooperative integrates forward toward the consumer market by entering into processing, wholesaling and retailing activities, producers must extend their ownership in a product over a longer period. Consequently, producers must obtain additional operating capital and are exposed to an extension of market risk. This extension of producer ownership interest in the commodity is most apparent in pooling cooperatives, in which producers maintain title to the commodity until final payment concurrent with settlement of the pool, after the commodity has been processed and sold.

However, even in cases where the cooperative pays cash for the commodity and takes title at delivery, the producer is subject to market risk. If the cooperative nets a margin on the commodity, the producer may receive a patronage refund. On the other hand, if the cooperative makes a loss it is written off against the members equities. Even if they are not, losses can affect the timing of the redemption of equities held by the producer.

The horizon problem occurs when an investment environment in which there is disincentive for members to contribute to growth opportunities. Horizon problem is considered to be the greatest impediment to the successful entrance of cooperatives in the value added processing activities. Value added processing activities require large capital commitments that will generally only pay off in the long run.

Opportunism

By enabling farmers to integrate up or down the marketing chain cooperatives provide an institutional mechanism for avoiding opportunism. Through producer representation the cooperatives can take account of the impact of the pricing decisions on its members. Therefore, unlike a firm for profit the cooperative has an incentive to adjust its prices and output to maximize the joint profits of both the cooperative business and the farm enterprises. Therefore, there is no need for complex contracting arrangement as an IOF would do to ensure supply.

Despite the vertical linkages to the farm enterprises cooperatives still remains the semblance of market exchange. This gives rise to opportunistic behaviour of the members. Each member of the cooperative own assets at two stages of production, first, the farmer takes his own investment decisions and owns the resulting assets at the farm. Then the farmers own the assets at the processing stage of production. If members continue to act as individual profit centres their behaviour may run contrary to the best interest of the integrated entity. Since the assets involved in adding value to agricultural production are often specialized and hence fixed the success of processing cooperatives is easily jeopardized if the members disregard the well being of their cooperation in favour of the success of their own operation.

Market opportunism is a major problem in cooperatives that have a policy to accept all member deliveries. In this type of cooperatives members have an incentive to shirk on quality as the individual producer does not carry the full liability of such behaviour. The problem is made more pronounced by fluctuations in commodity prices or product quality. Members may view their cooperative as a clearing house for products during periods of low prices and quality and may by pass the cooperative in favour of other marketing channels when price and/or quality are high. Such behaviour limits the ability of the cooperative to control the quality and quantity of the output it sells, making it difficult to meet customer and market needs.

New Generation Co-operatives

Most of the problems faced by the traditional cooperatives to enter into value added processing and marketing is addressed by New Generation Cooperatives. A New Generation Cooperative (NGC) is a form of business management that encourages agricultural producers and processors to expand the scope of their business sometimes described as hybrids between traditional cooperatives and limited companies. NGC's

may be one way to bridge the gap between community oriented primary producers and consumer focused markets. NGC uses a type of delivery rights and obligations to encourage business loyalty and provide a form of vertical integration.

New Generation Cooperatives share many of the key attributes of traditional cooperatives such as

--democratic control based on one member one vote.
--distribution of earnings based on use of service or sales to the cooperative
--a board of directors elected by the membership

However, there are some general attributes that make New Generation Cooperatives different from traditional cooperatives.

They are:

--Delivery rights are contracted and tied to the level of investment
--Membership is limited to those who purchase delivery rights
--Higher levels of equity investment by individual member is required
--Shares that provide delivery rights can be transferred and can fluctuate in value.

A key feature of the NGCs that distinguishes from other more traditional cooperatives is the linking of producer capital contributions and market delivery rights. Unlike traditional cooperatives in which start up expenses are minimal and growth is financed through members' retained earnings, permanent equity to fund NGC start up and growth is financed through sale of delivery rights. These delivery rights represent a member's right to deliver a specific amount of commodities to the cooperative. Members benefit in proportion to their use and nearly all NGCs are democratically controlled through one member/one vote.

NGC tries to overcome the free rider and horizon problem by fundamentally altering the incentive structure associated with cooperative ownership. By tightly linking equity contributions to tradable delivery rights which in turn provide members with a right to a residual claim on the cooperative earnings NGCs require members to invest in the cooperative in order to benefit from its use. The requirement that capital be invested up front eliminates the incentive for members to reduce or eliminate their capital investment on a year to year basis. The transferability of shares provides the cooperative with a permanent source of equity and provides producers with the opportunity to realize the

value of their equity without the cooperatives dissolution. This latter feature should allow members the ability to capture the discounted returns expected from the cooperatives investments regardless of when these returns are generated.

NGCs use delivery rights to avoid opportunistic behaviour. Delivery rights allow for efficient levels of production to be achieved for processing operations and guarantee a market for a fixed portion of member's production. The NGCs delivery shares represent more than simply a marketing contract between the members and the cooperatives. NGC delivery rights also represent a right or claim to the residual earnings of the cooperative. The most efficient method of organizing production is to make the owners of those services that are most variable and unpredictable the residual claimants of production. NGCs can be seen as an institutional form that provides members with a clear residual claim on the cooperative output. The number of members in an NGC depends upon the proposed capacity of the cooperatives operation. One of the key features of the NGC is its ability to control supply or access to the cooperatives operations. By limiting membership to those members who purchase the right to supply the cooperative, the NGC is able to ensure a steady supply of the agricultural inputs required for running operations at the most efficient level possible. In an NGC membership is not permanently closed. If the cooperative decides to expand production it could seek equity from producers outside the initial membership.

To sum, New Generation Cooperatives provide an alternative institutional structure to the farmers to overcome the shortcomings of the traditional cooperatives into integrating forward such as processing and marketing

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MAHAGRAPES*

Mahagrapes was established in January 1991 with the support of (i) National Co-operative Development Corporation (NCDC) (ii) Govt. of Maharashtra (Dept of Co-operation, Maharashtra State Agricultural Marketing Board) (iii) Agricultural and Processed Food Producers Export Development Authority (APEDA) and (iv) National Horticulture Mission. It is a partnership firm of 16 cooperative societies with the aim of exporting grapes. It has been exporting high quality grapes to European Union, Middle East for the past decade and half.

Genesis of Mahagrapes

Maharashtra State Grape Growers Association was formed in 1961 by a group of 25 producers. As grape growing was new to the State and proper practices to be followed were not known the farmers invited now and then experts from research institutions to understand better the growing practices. It was found application of gibralic acid improved yield. The association arranged for import of gibralic acid and supplied to members. This attracted other farmers who joined the organization swelling the members to 22,000 growers. The association was registered as a cooperative in 1971 and later a public trust. Continuous improvement in production technology spearheaded by local producer associations and cooperatives resulted in excess supply and fall in prices in the 1980s. This motivated producers and traders to start exploring distant markets within India. Producers from Maharashtra used the packs and fans as blowers to keep their produce cool during transportation in trucks to markets such as Ahmedabad, Delhi and Kolkata. While this manages to enlarge markets the net profit did not adequately compensate the high transport bottlenecks and the role of middlemen in the terminal markets. The grape growers association began looking for foreign markets. In 1990 samples of Indian grapes were air freighted to UK and subsequently to Middle East. On acceptance of these samples ways and means were explored to exploit the market. The Maharashtra State Grape Growers Association realized that focusing only on production technology of grapes is not adequate and there is need to examine marketing constraints. Producers decided to form growers' cooperative societies and establish pre-cooling and cold storage facility.

The Government of Maharashtra sent a seven member team which included five farmers to Europe to understand grape growing, processing and marketing. To study the post harvest handling of grapes and prolonging their shelf life a team was sent to California. The team found that by proper processing and packing the fruits can be stored for more than six

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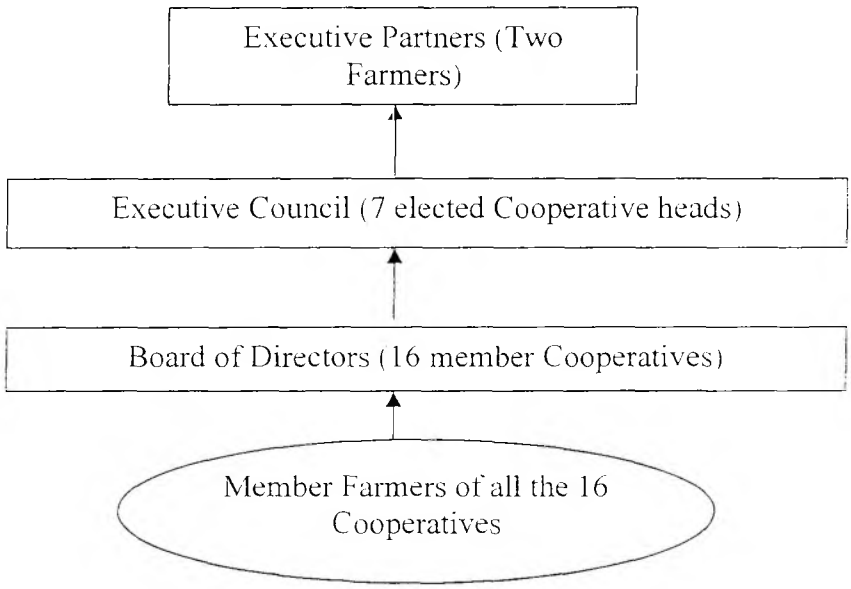
* Note prepared by Prof. S.R.Asokan for discussion.

months. This provided an opportunity to export the grapes by sea route rather than by air thus reducing the cost of freight considerably.

Mahagrapes was formed as a federation of 16 grape growers' cooperative society. It was registered under the State Cooperative Societies Act. The creation of Mahagrapes is unique in other ways. It is the first of its kind to make use of a special provision under 20 (i) of Maharashtra Cooperative Act. This section allowed cooperatives to associate with other sector of economy as well. Mahagrapes has the characteristics of both a cooperative and a private sector partnership firm. The role of Mahagrapes as marketing entity itself is a policy innovation. Producer organisation might not be most adept at marketing their products and thus the need for a specialized marketing entity.

Organisation

In the organizational structure of Mahagrapes, at the apex are the executive partners comprising two farmers. This is followed by an executive council consisting of seven elected heads, and then followed by a board of directors comprised of all the heads of the 16 cooperatives that have tied up with Mahagrapes. The producers i.e. the grape growers are members of these sixteen cooperatives. All policy decisions are taken by the board. The executive council, however, have discretionary powers to make emergency decisions including financial decisions up to the tune of 40 million rupees. This helps in expediting decision making.



The executive partners are assisted by a team of professional managers, headed by the Managing Director, who is supported by General Manager (Exports), Manager (logistics & liaison) Manager (finance) and Manager (quality control).

Business Rules

Some of the key features of the business rules of Mahagrapes are as follows:

- Mahagrapes has complete freedom to engage services of various experts and consultants for the purpose of effective management of its own and/or its partners' business.

- Mahagrapes has complete freedom to take decisions on sources and uses of funds (that is investment and financing decisions)

- The partners, that is, the cooperatives have to implement the programme chalked out by Mahagrapes.

- Each partner must do a minimum business of Rs. 0.5 million with Mahagrapes for continuation of membership of Mahagrapes.

The first two of the above rules ensure that the executives of the Mahagrapes have the required freedom to take key business decisions. The later two ensure that the linkages are firm enough so that the operations of Mahagrapes are sustained and not fall victim to the opportunistic behaviour of the member societies.

Quality Control

Quality Control is the focal point of the production and the distribution process. The quality of grapes is determined by the berry size, brix (sugar) level, colour, spray and soil deposit and the proportion of uneven and infected berries in the bunch. Quality of grapes is ensured by proper application of fertilizer, pest control and other specified cultivation practices. It is also ensured that the EU prohibition directive list relating to use of certain chemical compounds in strictly adhered to. To ensure higher quality product to the final consumer, officers of Mahagrapes provide farmers with:

- technical advice on soil testing and irrigation methods.
- advice on usage of fertilizers insecticides and fungicides.

- assistance in developing pre-cooling and cold storage facilities to the coop societies to improve the shelf life of the grapes.
- supply packing material to the farmers through the cooperative societies.
- Bio fertilizer & bio pesticides are developed and produced by Mahagrapes and provided to member farmers.

As a result of these concerted efforts Mahagrapes is able to maintain quality standards demanded by the importers.

Functioning

Grapes can be harvested in India at such a time when no grapes are harvested in other parts of the world by virtue of double pruning. About 90 per cent of the area under grapes is in the tropical regions of the country where vines are pruned twice. Pruning is done from July to December to harvest the crop during December-June. The time of harvesting grapes can be adjusted by scheduling the pruning to meet the changing period of demand in the Middle East. Similarly by pruning the vines in November the crops can be harvested in April to meet the demand in May in European Markets.

For exporting to EU, grape producing farmers have to meet standards prescribed by Euro GAP (Good Agricultural Practices). The Euro GAP certification requires the exporters to meet a number of conditions with regard to training of workers, planning and production operations, practice record keeping and disposal and post harvest operations. Given the small scale operations in India for individual farmers to obtain Euro GAP certificates would be impossible. Mahagrapes managed to get Euro GAP certification for the cooperatives societies and the farmer members of these cooperatives in turn are treated as Euro Gap certified. The quality of grapes is measured on two broad sets of parameters, physical and chemical characteristics. The stringency and the details in specification with regard to quality standards differ greatly from region to region and are considerably different from those in the domestic market.

Mahagrapes undertakes training to the growers at the vineyards about various aspects of production of grapes like girdling, thinning application of measured amounts of gibralic acid and fertilizer, irrigation scheduling and application of pesticides at regular intervals.

Mahagrapes continuously updates the list of banned and approved pesticides and fertilizers which keep changing now and then across their exporting countries. Similarly changes in the permissible levels of chemical residues are also provided by them regularly. All this information is disseminated to the farmers. Mahagrapes provides materials and technical

help along with infrastructural support to facilitate the implementation of the standards. Mahagrapes regular and constant monitoring of the vines by the farmers is facilitated by the scientists from National Research Centre (NRC) in Pune. This ensures that the plant remain healthy throughout the year and not just in the fruiting season.

Among the pre harvest activities, pruning of gardens is the most important for quality grape production. To achieve a given specification of the size of bunches and berries yields from are sacrificed to some extent. The size specification requires shoot and cluster thinning, application of gibralic acid for cluster elongation and berry thinning and girdling. These practices ensure that only a specified number of bunches grow per vine so that the fruit has ample space to attain the required size.

Grapes are harvested during early hours of the day when the ambient temperature is low. Bunches of grapes are carefully placed in a single layer in crates and are kept in the shade. Then grading is done which is basically removal of unwanted berries such as small, cracked etc and then sorting the bunches as per size and colour. The grapes are packed in corrugated boxes under specified conditions at the farm itself and are then transported to cooperative societies in refrigerated vans. Each of the member society is equipped with pre cooling and cold storage facilities.

From the vans grapes are taken to the pre-cooling rooms and are cooled to about 2 degrees Celsius over a span of six hours. This helps in prolonging the shelf life to upto 90 days. The pre-cooled grapes are then packed in corrugated boxes in 4.5/5/9 kg packs and kept in the cold storage. Boxes are specially designed with perforations to allow cool air to pass through. The boxes are palletized for easy handling. The grapes guard is used as per international norm to prevent growth of fungus and bacterial infection due to moisture and the tissue paper is used to absorb the moisture if any. The boxes are closed and sealed with adhesive tapes.

The cold stored grapes are transported in refrigerated containers when the container reaches the society location, the temperature inside the container is brought down to about 2 degrees by operating the generating set attached to the vehicle in which the container is mounted. The condition of the grapes is checked by surveyors appointed by the shipping companies before they are loaded into the container. After loading, the container is sealed by Central Excise and Customs Inspector. During the journey to Bombay, the generator set is kept functioning to maintain the temperature of the grapes at 2 degree Celsius. At the port too the temperature is maintained, during transportation by using the power supply to the vessel the temperature is controlled.

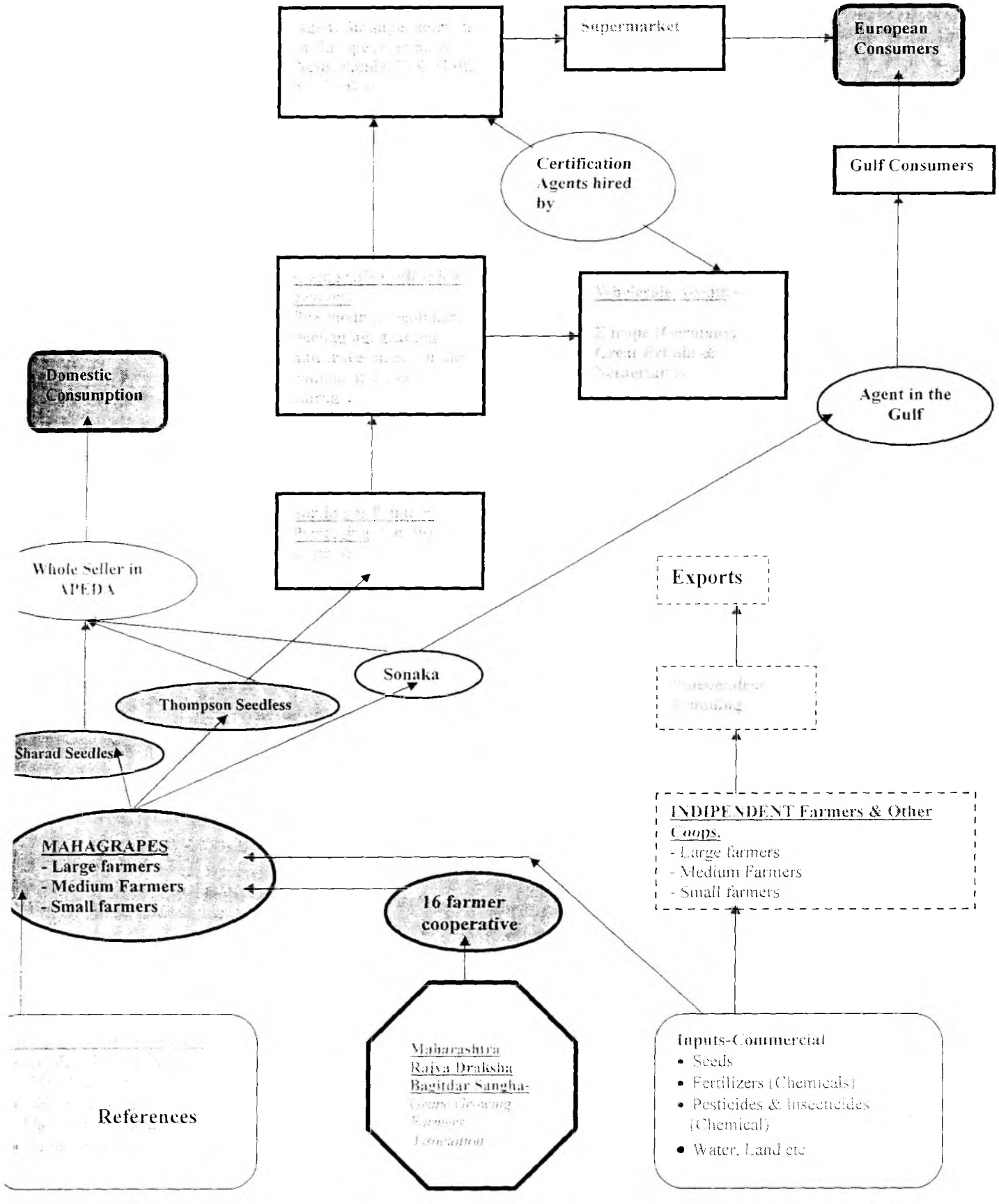
Mahagrapes negotiate the price with the importers before the beginning of the season. Once the quality of the consignment is accepted the payment is made. The payment is then made to the farmers as per the quantity and quality supplied by him. Mahagrapes makes no margin out of the operation instead farmers are charged as per the service rendered. It charges Rs 4 per kg of grapes for providing the service. An additional Rs7 is charged for the cooling and storage facilities by the society.

In the initial years, the extent of rejection of consignment was as high as 50 percent. Understanding quality requirements and taking up appropriate measures at different stages of the value chain beginning from seed quality, proper package of practices at the time of production, harvest and post harvest care took a few years to perfect. In 2002-03, Mahagrapes was exporting more than 800 tonnes of grapes. The farmers were realizing a far higher price than they were getting at the domestic market.

Conclusion

Maagrapes has emerged as a successful example of the co-operative model to overcome the marketing problems in a perishable commodity. It provides farmers with a platform for collective bargaining. Mahagrapes has been successful in achieving strong backward linkages with the farmers. It epitomizes the role of scale economies in information gathering and dissemination, procurement, processing to cater to the overseas markets. Mahagrapes have some success in establishing the brand name. These activities helped in increasing farmers income

SUPPLY CHAINS: Mahagrapes and Independent Grape farmers



Strategic Food Marketing

Food manufacturers or processors are primarily responsible for adding form utility to raw farm products. Wheat is milled into flour, livestock is converted into meat products, fruits and vegetables are canned or frozen. These firms play a vital role in transforming bulky, perishable farm products into storable, concentrated, and more appealing food products. In so doing, food processors become involved in several other marketing functions, such as transportation, storage, and financing. Food processors occupy a strategic position in the food industry. Through the purchase of farm commodities, their activities are closely linked to farmers. As the source of many food product innovations and variations and as the major brand advertisers in the food industry, they are also in close contact with consumer markets.

We will define food processing quite broadly. It may involve canning, freezing, or dehydrating farm products to make them more convenient food products. But it may also imply disassembling of a raw farm product-for example, dividing livestock carcasses into separate meat cuts or crushing soybeans to separate the oil from the meal of the bean. Alternatively, food processors may combine different farm products to make something new, as when a processor combines meat, vegetables, fruits, and other items into a frozen prepared dinner. Some food manufacturers specialize in producing food ingredients for other firms to further process-for example, an egg-breaking plant that provides egg products for bakers and other firms. All of these food processing activities add value to farm products.

Marketing Management in Food Manufacturing

Food processors are quite adept at using all of the 4Ps in developing value-added products that will improve their competitive positions in the marketplace by better satisfying consumers' needs and wants. They practice market segmentation, target marketing, product differentiation, and positioning of their value-added, branded products. *Positioning* refers to the image in the consumers' mind that a firm's marketing strategy gives to its products to increase their value for customers. One firm may position its products as snack foods while another chooses to occupy the center-of-plate (main meal) position.

Product Strategies

The goal of marketing management in food processing is to transform an undifferentiated, low-profit commodity into a differentiated, branded, high value-added, profitable food product. This is not magic, but neither is it an easy, inexpensive task. The marketing strategies employed by food processors are numerous. They are easily observed by reading any publication with food advertisements or by visiting the grocery store. In their product strategies, food processors attempt to incorporate all relevant aspects of the product bundle of attributes into their marketing strategies. Different foods and brands may emphasize quality, convenience, packaging, nutrition, or even price as the key marketing idea. Not every food product must-or even can-appeal to all consumers' tastes and preferences. There are mass-marketed foods that appeal to large numbers of consumers, but it is more common today for a new food to appeal to limited target markets or even very narrowly defined *niche* markets.

Branding is probably the most important product strategy of food processors. A *brand* is a name, term, symbol, or design that identifies the seller and differentiates the product from those of competitors. Branding permits the food manufacturer to certify the quality of products, transfer the goodwill of the firm to new products, and otherwise differentiate the product from competitors' offerings. A well-known and trusted brand can earn the food processor *brand loyalty* from customers. This can be helpful in introducing new products, forestalling consumer substitutions of less expensive brands, and prolonging the product life cycle.

There are other product strategies in this sector. Food processors in recent years have emphasized the development of convenience foods and stressed their "built-in maid service" aspects: ready-to-serve dinners, boil-in-the-bag foods, instant coffee, minute desserts, and brown-and-serve rolls. Processors have also led in the development of new processing techniques-dehydrating, irradiating, freeze-drying, aseptic processing and in the use of new packaging materials such as foil, cellophane, polyethylene, and so on. The search for new food products continually spawns new industries. Sometimes they compete directly with older established industries; sometimes they complement or supplement them. The frozen food industry has grown rapidly. The new processed potato

products that have increased dramatically in recent years represent another example of a new processing industry.

Much of the innovation and new product development occurs in this sector of the food industry. An *innovation* is the discovery and application of a new idea. In developing their marketing strategies, these firms employ market researchers, food scientists, and advertising agencies to monitor the demand for and acceptance of new products. The success of food processors frequently hinges on scientific breakthroughs, such as freeze-dried coffee or soft margarine, minor changes in product composition or design, or even an advertising theme.

Three types of innovations have been important for food manufacturers: (1) new marketing methods and techniques-which often increase operational efficiency; (2) new products or services-which add more consumer value to products; and (3) new business organizations-such as the cooperative food processor, joint ventures between firms, or new market channels (e.g., the fast-food outlet).

New foods pass through a *product life cycle*. Early in their development they require substantial research and marketing costs. However, if the new product reaches the acceptance stage, it is frequently quite profitable for a pioneering firm. As the product moves to the mass market stage, it begins to attract imitators and loses its initial uniqueness; profits begin to wane. Price cutting, low profit margins and widespread imitation characterize the market saturation stage. At this point, the firm hopes to have the next product innovation ready to introduce.

Pricing Strategies

Food processors may employ a number of pricing strategies. For example, one processor may use a gourmet strategy, with a high quality-high price mix, while another may use a value pricing strategy with a lower price and quality appeal. An important lesson in marketing is that not everyone wants the highest quality product and almost everyone is willing to sacrifice some quality for a lower price. Psychological pricing refers to a situation where a higher price, along with status advertising, encourages consumers to purchase products. Food manufactures also may package a product to a specific price point or use price discounts to attract consumers.

Distribution Strategies

Place or distribution strategies for food processors include selling through conventional food stores, selling foods in nonfood stores, selling to the foodservice market, selling in vending machines, mail or catalog selling, home delivery, and even selling foods door-to-door by high school or scouting organizations. While most food manufacturers prefer the sales volume they get from mass outlets, they may also include more selective place strategies in their marketing mix. Again, marketing teaches that there is no one best strategy for reaching consumers and multiple strategies are often preferred to a single approach. Food processors must also select a sales approach. Larger processors usually have their own sales offices, warehouses, and personal sales force. Smaller firms may sell their products through food brokers.

Processors may choose to market their products in many alternative ways. The three principal markets for food processors are industrial customers, food service firms, and consumer markets. These may involve local, regional, national, or international sales. Many food processors operate their own sales offices and wholesale operations but few are engaged in retailing directly to consumers. The large processor with a relatively full line of products will often operate its own warehouse and wholesaling system. If, on the other hand, the line of products is limited, the processor will often have the sales work done by a broker.

Promotional Strategies

The promotional strategies of food processors are perhaps the most visible signs of their marketing efforts. Food manufacturers have many choices to make here in selecting the goal of the promotion (to remind, inform, or persuade); the theme or appeal (price, quality, etc.) of the promotion; the type of promotion (advertisement, sales promotion, etc.); which media (print, broadcast, direct mail, point-of-purchase, etc.) will carry the promotion; and who the promotion will be targeted to (the user, the buyer, or the influencer). Moreover, the food manufacturer must fashion a combination of promotions to influence the buying decisions of both consumers and the retail distributors who will purchase and display the products. Increasingly, processors are finding it profitable to shift promotional expenses from direct consumer advertising (sometimes called pull promotion) to trade promotions (push promotion).

The major food processors differentiate their products through mass-media advertising, coupons, free samples, promotional trade allowances, and point-of-purchase merchandising materials. These forms of competition have been criticized as cost and food price increasing. However, these promotional strategies can result in lower consumer prices and perhaps greater consumer satisfaction. Also, consumers can choose between the highly promoted manufactured foods and their private-label, lower-priced counterparts. Both forms of competition appear to fill a need in the marketplace.

Its value-adding functions can expand the markets for farm products and provide consumers with a range of food products to meet every taste and budget. They also contribute to a reliable flow of clean, safe, and nutritious products. Yet, the sector is not without its critics. Some argue that food processing and advertising have distorted consumer food preferences with adverse effects on the nation's health. Others suggest that innovation, product differentiation, and competitive tactics of food processors have raised food prices and profits.

Emerging Food Markets

Historically, the commodity-oriented agribusiness sector has been driven by economic forces to produce at maximum efficiency while maintaining low costs. Price signals, defined at the level of relatively coarse grades and standards, were the primary form of information communicated throughout the market channel. The result has been a system, which is remarkably effective at converting undifferentiated commodities into relatively low-cost food. Despite its cost effectiveness, the commodity-oriented agribusiness sector is undergoing change, inspired in part by the evolution of more demanding and differentiated food consumer.

Two alternative views of the food and agribusiness sector are presented in *figures 1a and 1b.*

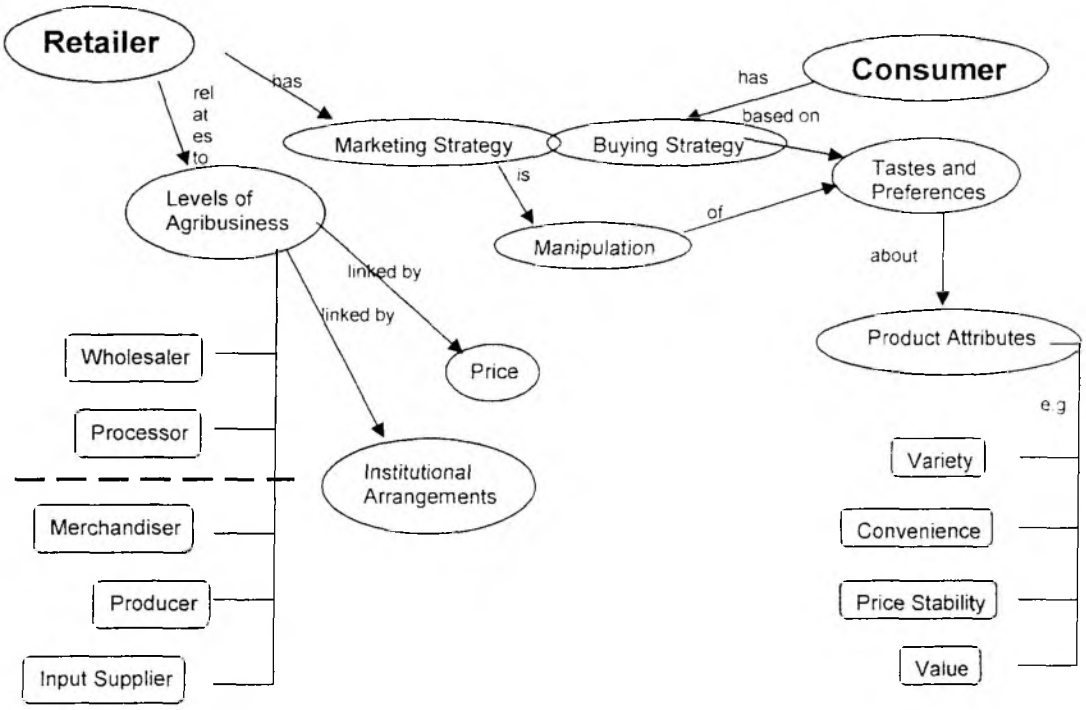


Figure 1a. Standard view of coordination in the food and agribusiness sector

In the more standard view (*fig. 1a*) strategies are focused on what was characterized as manipulation of consumers' tastes and preferences. A contrasting view, more characteristic of strategic behaviour in the 1990s, is shown in figure 1b where the energies are directed toward discovering consumer preferences and adapting product attributes in response to consumer demands.

Thus, in *figure 1 b* information technology is depicted as revealing additional product attributes, which were not always apparent to consumers. Where buying decisions were once made on such aspects as variety, convenience, price stability, and value (see fig.1a), now consumers can also evaluate additional characteristics (see fig.1b) which were previously experienced only indirectly, such as product quality (e.g., how much milk in a slice of cheese), nutrition (e.g., what additives are present), and environmental aspects (e.g., whether an item is organically grown).

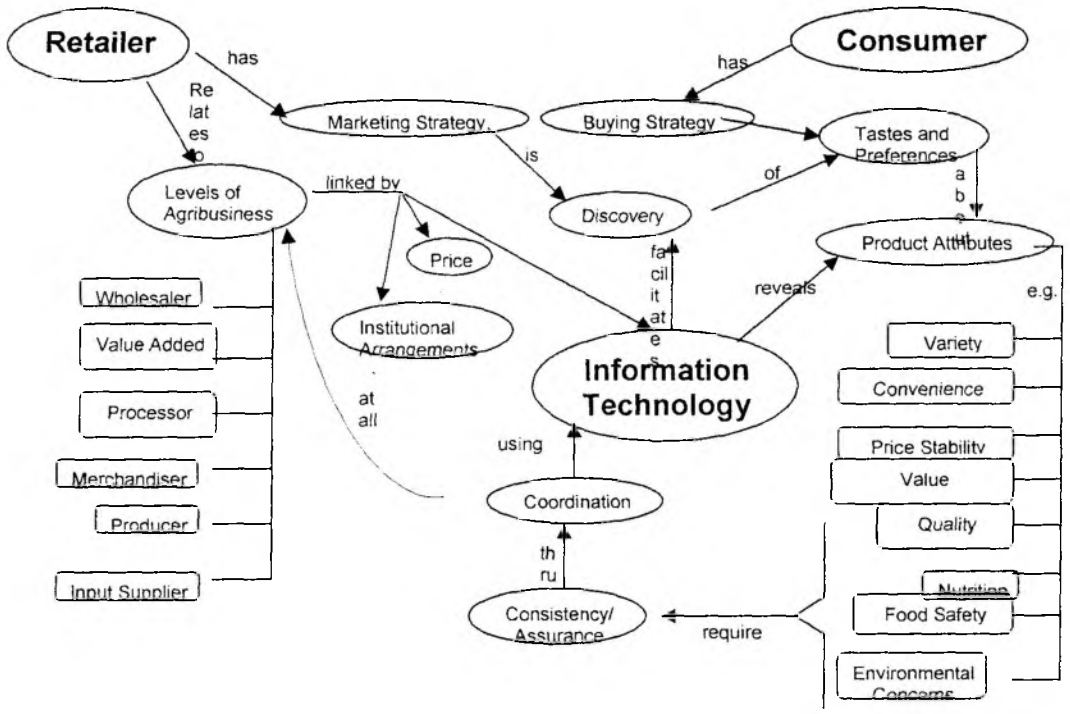


Figure 1b. An alternative view of coordination in the food and agribusiness sector

However, for consumers, it is believed that they are more interested in the benefits they derive from the product than in the technical features of this product per se. Understanding of consumer choice behaviour is the basis of a successful marketing strategy. The choice behaviour is largely based on previous consumer preferences, but non-product related factors such as availability and price promotions might interfere with the relation between consumer perception and final choice. A need structure differs among groups of consumers as well as consumer perceptions which are in fact the ideas about brands or products within a certain product category.

However, some of the product attributes which information technology has made transparent cannot be created during the marketing process but rather must be assured from the beginning of the production-marketing chain. As shown at the bottom of figure 1b, quality, nutrition, food safety, and environmental concerns are affected at each step of the continuum, which begins with the input provider and ends with the consumer. This puts into question the traditional view that product differentiation is the responsibility of the marketing subsector (those players above the dashed line in figure 1a and not the production subsector (those players below the dashed line in fig. 1a). In the alternative

view shown in fig. 1b the sector is shown without segmentation between subsectors. Furthermore, information technology is shown as a means of coordinating activities across levels in order to assure certain product attributes.

An important point to note is that the two frameworks presented in figure. 1a and 1b are not mutually exclusive. For example, there may be many cases in which product differentiation early in the food-marketing chain is not feasible. Alternatively, consumers may not be willing to pay a high enough premium to justify differentiation at the farm (or some other) level. The challenge is to recognize where the alternative framework may be more appropriate and to seek out opportunities for competitive advantage through coordination.

Recent advances in food science and technology are impacting the entire food marketing system, from farmers to food processors to consumers. Whole new industries, products, and markets have been created by food science developments of recent years, such as frozen concentrated fruit juices, aseptic shelf-stable fruit juices, corn sweeteners, frozen baked goods, and dehydrated soups, to name a few. Food processors have developed fat substitutes and low calorie and low cholesterol foods to satisfy consumer demands. Food scientists are now able to produce food textures, colors, smells, flavors, and nutrients in almost any combination desired by processors.

By more closely controlling the characteristics of foods, these technological developments allow plant and animal products to be tailored to specific processor and consumer wants. This creates incentives for processors to better coordinate the production activities of farmers through contracts and other arrangements. These "engineered" or "restructured" foods also provide processors with new opportunities to differentiate and target market their products by making entirely new product bundles of attributes for consumers.

Management Problems of Food Processors

Food processors experience problems and face challenges in two major areas: processing operations and procurement.

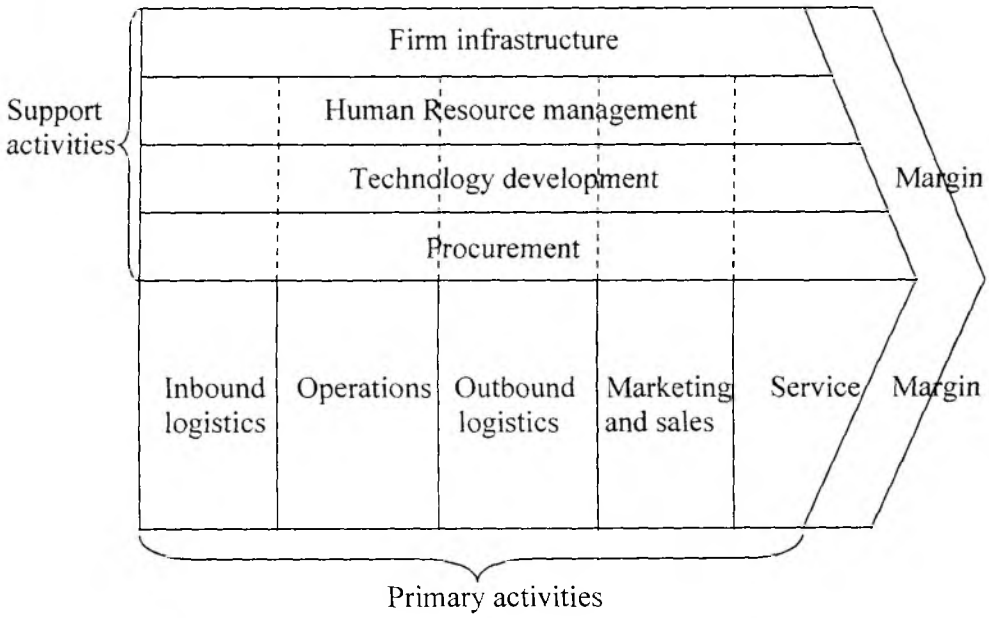
Processing Operations

Food processing involves significant investments in plant and equipment. In order to operate efficiently, these facilities should be used to full capacity year-round, every year. This is difficult to achieve when there are wide variations in farm product supplies from year to year and within seasons. Because of the short harvest season and perishability of many farm products, food processing plants may operate at above capacity rates for a few months of the year and at below-capacity rates for the rest of the year. These variations can significantly influence food processing costs. Expanded storage facilities, contracts that coordinate farm supplies with processor needs, storage of the product at harvest for later processing, and extension of the processing season by manufacturing non-seasonal food items have contributed to the solution to this problem.

Buying Operations

Food processors are major buyers of farm products. Their procurement decisions must consider how to handle many of the marketing functions, including storage, transportation, risk bearing, financing, and market intelligence. Because of variations in output and prices of farm products, the buying and pricing decisions of processors affect the division of risk shared between food producers and processors. Food processors have developed elaborate market information, financing, and grower assistance programs to better manage their purchasing function.

Competitive Strategy



The buying power of food processors is generally greater in procurement markets than in their sales markets. This is because most food processors secure their raw product supplies from an area near their plants while they sell in larger regional and national markets. Not all processors will compete for the same farm product supplies, and in many local markets there may be only a few buyers. This lack of competition may result in marketing and price problems for farmers.

Food processors utilize a wide variety of ways to procure their raw product materials from farmers. Most processors do not produce their own raw product supplies but purchase these from farmers. Some purchase directly from producers at the farm or at the plant. Other food manufacturers use the services of such independent marketing agencies as livestock commission agents, grain elevators, or fruit and vegetable brokers to secure their supplies. For some commodities, the processor negotiates with farm cooperatives or bargaining associations for supplies and prices.

Market orientation requires that processors more carefully coordinate their procurement activities with their processing and selling operations. This may involve actual ownership of the farm unit or contracting with producers for raw products supplies. The improved scheduling and coordination of such practices can reduce processors' supply and price risks, contribute to more successful marketing strategies, and improve profits.

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Indian Ice Cream Market : Amul Ice Cream Success Story

R.S. Sodhi*

> "The organisation endeavours to delight the customers without exploiting them, with a belief that there is no difference between the terrifically rich and the woebegone."

BACKGROUND OF GCMMF

Gujarat Cooperative Milk Marketing Federation Ltd. (GCMMF) is Asia's largest integrated dairy products manufacturing and marketing organization and India's largest food company, with an annual turnover of more than Rs. 2750 crores. This is a testimony to the collective wisdom of 22 lakh milk producers of Gujarat who have persevered to build a uniquely successful cooperative organization and the much-valued brands "Amul" and "Sagar" over the last 58 years. GCMMF is presently the market leader in almost all dairy product categories i.e. Butter, Milk Powders, Infant Milk food, Cheese, Cheese Spreads, Milk and Ice Cream etc.

The highly valued consumer of Amul are promised an unwritten contract to satisfy her taste and nutritional requirements by offering her VFM (Value for Money) products the quality of which is hard to match. The core of the Amul Brand is something that is genetically implanted in the very fabric of its construction. The organisation endeavours to delight the customers without exploiting them, with a belief that there is no difference between the terrifically rich and the woebegone.

INDIAN ICE CREAM MARKET

The ice cream market in India can be divided into the branded market and the grey market. Grey market consists of small local players and cottage industry players. The total market size is Rs. 2000 crores. The branded market at present is 100 million litres per annum valued at Rs. 600 crores.

GLOBAL TRENDS IN ICE CREAM CONSUMPTION

The per capita consumption (PCC), at present in India, is 100 ml/annum, as compared to 22 litres/annum in case of the USA. The branded market is expected to grow at the rate of 10 per cent annually. The global average is also 2 ltr/annum. This very clearly indicates that there is a scope to grow 10 times and match at least the global average.

Sl.No.	Name of the Country	PCC in Litres
1	USA	22
2	UK	5
3	Pakistan	0.41
4	Thailand	1
5	India	0.10
6	Global Average	2

AMUL'S ENTRY INTO ICE CREAM

For any new player to enter this market, three things are critical:

- Decentralized manufacturing facilities

* *Genetal Manager (Marketing), GCMMF, Anand.*

- Efficient cold chain
- Growing market

For Amul, the entry into Ice cream market was just a logical extension of its business because of the following reasons:

- The brand equity of Amul.
- Large & quality milk procurement base, which is the major raw material for ice cream.
- Technical know how for processing.
- Need for converting branded ice cream into a mass product instead of limiting it as a premium product.

AMUL'S STRATEGY

Value For Money (VFM): To give best quality product at the most affordable price. This will enable to achieve the following objectives:

Increase per capita Consumption of Ice Cream: Presently, per capita consumption of ice cream in India is very low and even developing countries like Sri Lanka and Pakistan have much more per capita consumption of ice cream.

Real Milk Real Ice Cream: As Amul offers the best quality products, which is made out of real milk, all the advertising campaign contains the punch line "Real Milk Real Ice Cream" which has enabled to synchronise with dairy based ice cream and achieve leadership status.

Packaging with the Punch Line "Real Milk Real Ice Cream": All Amul Ice Creams carry the punch line " Real Milk Real Ice Cream" below Amul Ice Cream logo.

Ice Cream Made from Fresh Milk: Amul ice creams are exclusively made from fresh milk and fresh cream. Major competitors have switched over from dairy based ice cream to vegetable fat based ice cream, which is called Frozen Dessert. In most cases, this happens because fat happens to be the most expensive ingredient of ice cream. Therefore, most companies add vegetable fat, which is three times cheaper than milk fat.

Moreover, dairy-based ice cream contains vitamins A, D, E and K. If a kid is not drinking milk, he/she can have one cup of Amul ice cream, which is equal to 1 glass full of milk. This is not true for Frozen Dessert, which is made out of refined vegetable fat. While mos other players like HLL, Vadilal, and Cream Bel are offering Frozen Desserts.

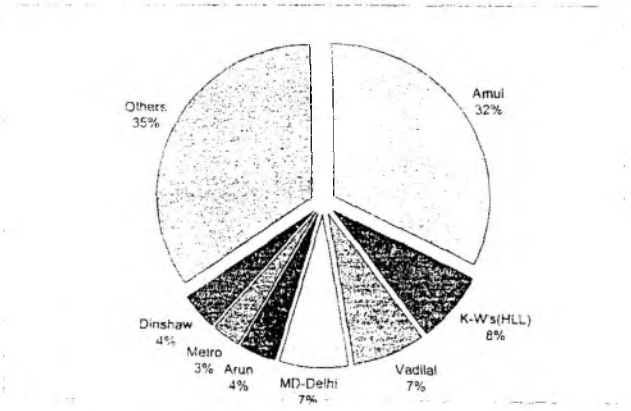
Pricing: As compared to the competitors, Amul's pricing is always 40-50 per cent economical.

AMUL ICE CREAM: PRESENT STATUS

In a short span of 7 years Amul ice cream has become the No. 1 brand in the country.

Our Position in the Market: Amul is the No.1 Brand of India: Amul has achieved a market share of 32% against HLL market share of 8% (Fig 1).

Fig 1: Percentage Market Share of Different Ice Cream Brand Total Market 100 million lit/annum



(Source : HLL Annual Report, Market Survey)

SEGMENTATION

The company has divided the entire ice cream portfolio in different segments keeping in mind the target consumers (Fig 2).

NEW LAUNCHES FOR REAL ICE CREAM SEASON

Various new flavours has been introduced for the ice cream season to create excitement in the market. Consumers expect new variants of ice cream in the real ice cream season.

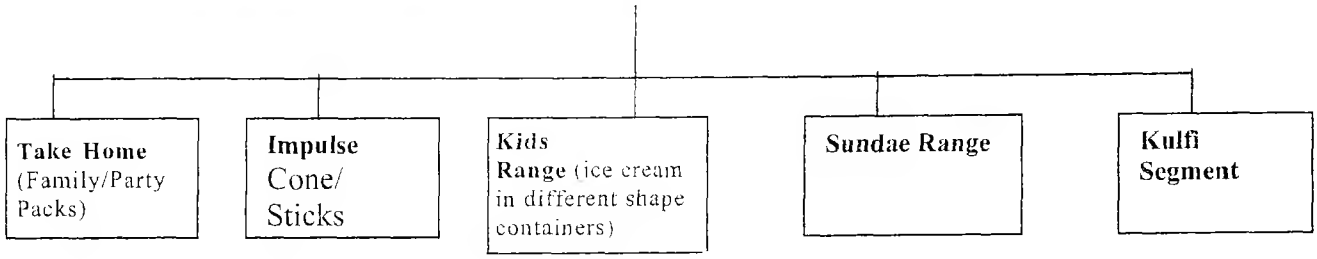
Launch of Amul "Utterly Delicious" Super Premium Ice Cream

The GCMMF has also launched a separate category of Super Premium ice cream.

The details are as follows:

Flavours: This product has been launched in 100

Fig 2: Segmentation



l as well as one ltr pack with the following clusive flavours:

Fresh Litchi • Fresh Strawberry • Santra-antra • Alphonso-Mango • Choco Chips • Cheese th Almonds • Date with Honey • Anjir • Roasted mond • Rajbhog

tterly Delicious Cake Magic
ake with ice cream)

e cream especially for celebrations has been troduced i.e. Birthday parties/festival celebration any other celebrations. It has been named as JTTERLY DELICIOUS CAKE MAGIC". This is vailable in one litre. The flavours are — lackforest, Vanilla ice cream with sponge cake ıd toppings of chocolate shreds.

undae Segment: "Real Milk Real Sundaes t Unbelievable Price"

aunch of Double Sundae – An Innovative roduct: Amul "Double sundae" is a real ice cream 'Real Milk Real Sundae at Unbelievable prices".

aunch of Sundae Magic: This is a unique product ith 8 Sundaes in one container.

ids Segment –"Amul Fundoo Range":

ı this range, some of the attractive shapes have een introduced for kids, which are as follows:

Fundoo Ball • Fundoo Mango • Fundoo Fresh Strawberry • Fundoo Sundae • Fundoo Santra Mantra.

Promotion of *Kulfies*

Amul is offering Indian Traditional *Kulfi* to the esteem consumers. The various ranges of *kulfi* are:

- Shahi Badam Shahi Pista – Conical shape
- Matka *Kulfi*
- *Kulfi* – Take away

Impulse Segment-Sticks

New sticks variants have also been launched — Ice candies/Dollies in 3-4 flavours/attractive colours that will be packed in attractive colorful packing. These flavours are:

• Orange Dolly • Lemon Dolly • Cola Candy • Lemon Candy • Double Mazza Candy (With 2 flavours) • Almond Fudge

WHERE WE WANT TO BE

The Amul ice cream is expected to be Rs. 1000 crore brand by 2010.

CONSTRAINTS IN MAKING ICE CREAM AVAILABLE TO MASSES

Due to very high levies on ice cream, like 16 per cent excise and sales tax, ice cream consumption in India is very less i.e. 100 ml per person per year against global average of 2 litre and US consumption of 22 litre.

WTO – AN INTRODUCTION

THE AGRICULTURE AGREEMENT: NEW RULES AND COMMITMENTS

The objective of the **Agriculture Agreement** is to reform trade in the sector and to make policies more market-oriented. This would improve predictability and security for importing and exporting countries alike.

The new rules and commitments apply to:

- **market access** – various trade restrictions confronting imports
- **domestic support** – subsidies and other programmes, including those that raise or guarantee farmgate prices and farmers' incomes
- **export subsidies** and other methods used to make exports artificially competitive.

The agreement does allow governments to support their rural economies, but preferably through policies that cause less distortion to trade. It also allows some flexibility in the way commitments are implemented. Developing countries do not have to cut their subsidies or lower their tariffs as much as developed countries, and they are given extra time to complete their obligations. Least-developed countries don't have to do this at all. Special provisions deal with the interests of countries that rely on imports for their food supplies, and the concerns of least-developed economies.

"Peace" provisions within the agreement aim to reduce the likelihood of disputes or challenges on agricultural subsidies over a period of nine years, until the end of 2003.

Market access: 'tariffs only' please

The new rule for market access in agricultural products is "tariffs only". Before the Uruguay Round, some agricultural imports were restricted by quotas and other non-tariff measures. These have been replaced by tariffs that provide more-or-less equivalent levels of protection – if the previous policy meant domestic prices were 75% higher than world prices, then the new tariff could be around 75%. (Converting the quotas and other types of measures to tariffs in this way was called "tariffication".)

The tariffication package contained more. It ensured that quantities imported before the agreement took effect could continue to be imported, and it guaranteed that some new quantities were charged duty rates that were not prohibitive. This was achieved by a system of "tariff-quotas" – lower tariff rates for specified quantities, higher (sometimes much higher) rates for quantities that exceed the quota.

The newly committed tariffs and tariff quotas, covering all agricultural products, took effect in 1995. Uruguay Round participants agreed that developed countries would cut the tariffs (the higher out-of-quota rates in the case of tariff-quotas) by an average of 36%, in equal steps over six years. Developing countries would make 24% cuts over 10 years. Several developing countries also used the option of offering ceiling tariff rates in cases where duties were not "bound" (i.e. committed under GATT or WTO regulations) before the Uruguay Round. Least-developed countries do not have to cut their tariffs. (These figures do not actually appear in the Agriculture Agreement. Participants used

them to prepare their schedules – i.e. lists of commitments. It is the commitments listed in the schedules that are legally binding.)

Numerical targets for agriculture

The reductions in agricultural subsidies and protection agreed in the Uruguay Round. Only the figures for cutting export subsidies appear in the agreement.

	Developed countries 6 years: 1995-2000	**Developing countries** 10 years: 1995-2004
Tariffs		
Average cut for all agricultural products	-36%	-24%
Minimum cut per product	-15%	-10%
Domestic support		
Total AMS cuts for sector (base period: 1986-88)	-20%	-13%
Exports		
Value of subsidies	-36%	-24%
Subsidized quantities (base period: 1986-90)	-21%	-14%

Least developed countries do not have to make commitments to reduce tariffs or subsidies.

The base level for tariff cuts was the bound rate before 1 January 1995; or, for unbound tariffs, the actual rate charged in September 1986 when the Uruguay Round began.

The other figures were targets used to calculate countries' legally-binding "schedules" of commitments.

For products whose non-tariff restrictions have been converted to tariffs, governments are allowed to take special emergency actions ("special safeguards") in order to prevent swiftly falling prices or surges in imports from hurting their farmers. But the agreement specified when and how those emergency actions can be introduced (for example, they cannot be used on imports within a tariff-quota).

Four countries used "special treatment" provisions to restrict imports of particularly sensitive products (mainly rice) during the implementation period (to 2000 for developed countries, to 2004 for developing nations), but subject to strictly defined conditions, including minimum access for overseas supplier. The four were: Japan, Rep. of Korea, and the Philippines for rice; and Israel for sheep meat, whole milk powder and certain cheeses. Japan and Israel have now given up this right, but a new member, Chinese Taipei, has joined Rep. of Korea and the Philippines with special treatment for rice.

Domestic support: some you can some you can't

The main complaint about policies which support domestic prices, or subsidize production in some other way, is that they encourage over-production. This squeezes out imports or leads to export subsidies and low-priced dumping on world markets. The Agriculture Agreement distinguishes between support programmes that stimulate production directly, and those that are considered to have no direct effect.

Domestic policies that do have a direct effect on production and trade to be cut back. WTO members calculated how much support of this kind they were providing per year for the agricultural sector (using calculations known as "total aggregate measurement of support" or "Total AMS") in the base years of 1986-88. Developed countries agreed to reduce these figures by 20% over six years starting in 1995. Developing countries agreed to make 13% cuts over 10 years. Least-developed countries do not need to make any cuts. (This category of domestic support is sometimes called the "amber box", a reference to the amber colour of traffic lights, which means "slow down".)

Measures with minimal impact on trade can be used freely – they are in a "green box" ("green" as in traffic lights). They include government services such as research, disease control, infrastructure and food security. They also include payment made directly to farmers that do not stimulate production, such as certain forms of direct income support assistance to help farmers restructure agriculture, and direct payments under environmental and regional assistance programmes.

Also permitted, are certain direct payments to farmers where the farmers are required to limit production (sometimes called "blue box" measures), certain government assistance programmes to encourage agricultural and rural development in developing countries, and other support on a small scale ("de minimis") when compared with the total value of the product or products supported (5% or less in the case of developed countries and 10% or less for developing countries).

Export subsidies: limits on spending and quantities

The Agriculture Agreement prohibits export subsidies on agricultural products unless the subsidies are specified in a member's lists of commitments. Where they are listed, the agreement requires WTO members to cut both the amount of money they spend on export subsidies and the quantities of exports that receive subsidies. Taking averages for 1986-90 as the base level, developed countries agreed to cut the value of export subsidies by 36% over the six years starting in 1995 (24% over 10 years for developing countries). Developed countries also agreed to reduce the quantities of subsidized exports by 21% over the six years (14% over 10 years for developing countries). Least-developed countries do not need to make any cuts.

During the six-year implementation period, developing countries are allowed under certain conditions to use subsidies to reduce the costs of marketing and transporting exports.

The least-developed and those depending on food imports

Under the Agriculture Agreement WTO members have to reduce their subsidized export. But some importing countries depend on supplies of cheap, subsidized food from the major industrialized nations. They include some of the poorest countries, and although their farming sectors might receive a boost from higher prices caused by reduced export subsidies, they might need temporary assistance to make the necessary adjustments to deal with higher priced imports, and eventually to export. A special ministerial decision sets out objectives, and certain measures, for the provision of food aid and aid for agricultural development. It also refers to the possibility of assistance from the International Monetary Fund and the World Bank to finance commercial food imports.

WHAT IS 'DISTORTION'?

This a key issue. Trade is distorted if prices are higher or lower than normal, and if quantities produced, brought, and sold are also higher or lower than normal – i.e. than the levels that would usually exist in a competitive market.

For example, import barriers and domestic subsidies can make crops more expensive on a country's internal market. The higher prices can encourage over-production. If the surplus is to be sold on world markets, where prices are lower, then export subsidies are needed. As a result, the subsidizing countries can be producing and exporting considerably more than they normally would.

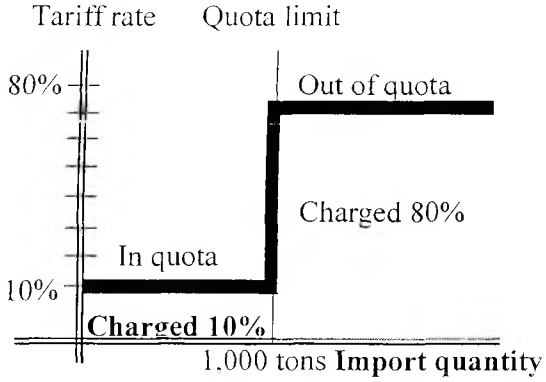
Governments usually give three reasons for supporting and protecting their farmers, even if this distorts agricultural trade:

- to make sure that enough food is produced to meet the country's needs.
- To shield farmers from the effects of the weather and swings in world prices
- To preserve rural society.

But the policies have often been expensive, and they have created gluts leading to export subsidy wars. Countries with less money for subsidies have suffered. The debate in the negotiations is whether these objectives can be met without distorting trade.

A TARIFF-QUOTA

This is what a tariff-quota might look like



Imports entering under the tariff-quota (up to 1,000 tons) are generally charged 10%. Imports entering outside the tariff-quota are charged 80%. Under the Uruguay Round agreement, the 1,000 tons would be based on actual imports in the base period or an agreed "minimum access" formula.

Tariff quotas are also called "tariff-rate quotas".

FOOD, ANIMAL AND PLANT PRODUCTS: HOW SAFE IS SAFE?

Problem: How do you ensure that your country's consumers are being supplied with food that is safe to eat – "safe" by the standards you consider appropriate? And at the same time, how can you ensure that strict health and safety regulations are not being used as an excuse for protecting domestic producers?

A separate agreement on food safety and animal and plant health standards (the **Sanitary and Phytosanitary Measures Agreement** or **SPS**) sets out the basic rules.

It allows countries to set their own standards. But it also says regulations must be based on science. They should be applied only to the extent necessary to protect human, animal or plant life or health. And they should not arbitrarily or unjustifiably discriminate between countries where identical or similar conditions prevail.

Member countries are encouraged to use international standards, guidelines and recommendations where they exist. However, members may use measures which result in higher standards if there is scientific justification. They can also set higher standards based on appropriate assessment of risks so long as the approach is consistent, not arbitrary. And they can to some extent apply the "precautionary principle", a kind of "safety first" approach to deal with scientific uncertainty. Article 5.7 of the SPS Agreement allows temporary "precautionary" measures.

The agreement still allows countries to use different standards and different methods of inspecting products. So how can an exporting country be sure the practices it applies to its products are acceptable in an importing country? If an exporting country can demonstrate that the measures it applies to its exports achieve the same level of health protection as in the importing country, then the importing country is expected to accept the exporting country's standards and methods.

The agreement includes provisions on control, inspection and approval procedures. Governments must provide advance notice of new or changed sanitary and phytosanitary regulations, and establish a national enquiry point to provide information. The agreement complements that on technical barriers to trade.

TECHNICAL REGULATIONS AND STANDARDS

Technical regulations and industrial standards are important, but they vary from country to country. Having too many different standards makes life difficult for producers and exporters. If the standards are set arbitrarily, they could be used as an excuse for protectionism. Standards can become obstacles to trade.

The **Technical Barriers to Trade Agreement (TBT)** tries to ensure that regulations, standards, testing and certification procedures do not create unnecessary obstacles.

The agreement recognizes countries' rights to adopt the standards they consider appropriate – for example, for human, animal or plant life or health, for the protection of the environment or to meet other consumer interests. Moreover, members are not prevented from taking measures necessary to ensure their standards are met. In order to prevent too much diversity, the agreement encourages countries to use international

standards where these are appropriate, but it does not require them to change their levels of protection as a result.

The agreement sets out a code of good practice for the preparation, adoption and application of standards by central government bodies. It also includes provisions describing how local government and non-governmental bodies should apply their own regulations – normally they should use the same principles as apply to central governments.

The agreement says the procedures used to decide whether a product conforms with national standards have to be fair and equitable. It discourages any methods that would give domestically produced goods an unfair advantage. The agreement also encourages countries to recognize each other's testing procedures. That way, a product can be assessed to see if it meets the importing country's standards through testing in the country where it is made.

Manufacturers and exporters need to know what the latest standards are in their prospective markets. To help ensure that this information is made available conveniently, all WTO member governments are required to establish national enquiry points.

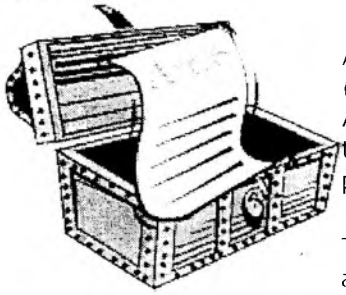
WHOSE INTERNATIONAL STANDARDS?

An annex to the Sanitary and Phytosanitary Measures Agreement names:

- the FAO/WHO Codex Alimentarius commission: for food
- the International Animal Health Organization (Office International des Epizooties): for animal health
- The FAO's Secretariat of the International Plant Protection Convention: for plant health.

Governments can add any other international organizations or agreements whose membership is open to all WTO members.

Amber box

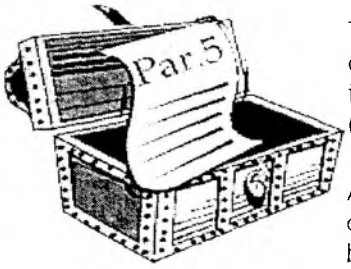


All domestic support measures considered to distort production and trade (with some exceptions) fall into the amber box, which is defined in Article 6 of the Agriculture Agreement as all domestic supports except those in the blue and green boxes. These include measures to support prices, or subsidies directly related to production quantities.

These supports are subject to limits: "de minimis" minimal supports are allowed (5% of agricultural production for developed countries, 10% for developing countries); the 30 WTO members that had larger subsidies than the de minimis levels at the beginning of the post-Uruguay Round reform period are committed to reduce these subsidies.

The reduction commitments are expressed in terms of a "Total Aggregate Measurement of Support" (Total AMS) which includes all supports for specified products together with supports that are not for specific products, in one single figure. In the current negotiations, various proposals deal with how much further these subsidies should be reduced, and whether limits should be set for specific products rather than continuing with the single overall "aggregate" limits. In the Agriculture Agreement, AMS is defined in Article 1 and Annexes 3 and 4.

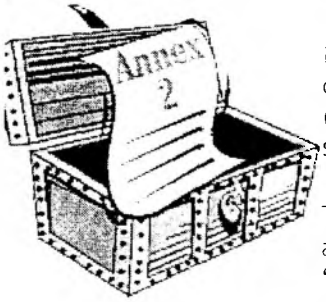
Blue box



This is the "amber box with conditions" – conditions designed to reduce distortion. Any support that would normally be in the amber box, is placed in the blue box if the support also requires farmers to limit production (details set out in Paragraph 5 of Article 6 of the Agriculture Agreement).

At present there are no limits on spending on blue box subsidies. In the current negotiations, some countries want to keep the blue box as it is because they see it as a crucial means of moving away from distorting amber box subsidies without causing too much hardship. Others wanted to set limits or reduction commitments, some advocating moving these supports into the amber box.

Green box



The green box is defined in Annex 2 of the Agriculture Agreement.

In order to qualify, green box subsidies must not distort trade, or at most cause minimal distortion (paragraph 1). They have to be government-funded (not by charging consumers higher prices) and must not involve price support.

They tend to be programmes that are not targeted at particular products, and include direct income supports for farmers that are not related to (are "decoupled" from) current production levels or prices. They also include environmental protection and regional development programmes. "Green box" subsidies are therefore allowed without limits, provided they comply with the policy-specific criteria set out in Annex 2.

In the current negotiations, some countries argue that some of the subsidies listed in Annex 2 might not meet the criteria of the annex's first paragraph – because of the large amounts paid, or because of the nature of these subsidies, the trade distortion they cause might be more than minimal. Among the subsidies under discussion here are: direct payments to producers (paragraph 5), including decoupled income support (paragraph 6), and government financial support for income insurance and income safety-net programmes (paragraph 7), and other paragraphs. Some other countries take the opposite view – that the current criteria are adequate, and might even need to be made more flexible to take better account of non-trade concerns such as environmental protection and animal welfare.

Section I

Frequently Asked Questions (FAQs)

What is the World Trade Organisation?

The World Trade Organisation (WTO) is an international organisation dealing with the rules of trade between nations. There are a number of ways of looking at the WTO. It is an organisation for liberalising trade, a forum for governments to negotiate trade agreements and a place for them to settle trade disputes.

The WTO came into force on 1 January 1995, but its trading system is half a century older. Since 1948, the General Agreement on Tariffs and Trade (GATT) had provided the rules for the system. It did not take long for the General Agreement to give birth to an unofficial, *de facto* international organisation, also known informally as GATT. Over the years GATT evolved through several rounds of negotiations. The last and largest GATT round was the Uruguay Round which lasted from 1986 to 1994 and led to the creation of the WTO. Whereas GATT had dealt mainly with trade in goods, the WTO and its agreements now cover trade in services, inventions, creations and designs (intellectual property).

How is the WTO different from GATT?

Before 1995, in the absence of a permanent institutional framework for the multilateral trading system, the expression 'the GATT' used to refer to both the actual General Agreement on Tariffs and Trade and to the framework in which the multilateral trade negotiations took place. Since 1 January 1995, the World Trade Organisation has constituted the permanent institutional framework for the multilateral trading system. Unlike the GATT, which was not an official international organisation, the WTO is an international organisation with a Secretariat. GATT no longer exists as an organisation.

While the GATT had mainly dealt with trade in goods, the WTO and its agreements also cover disciplines on trade in services and intellectual property rights.

3. Does GATT No Longer Exist? How is G. 1947 Different From GATT 1994?

Although GATT as an organisation no longer exists, the agreement under the original GATT along with its amendments till 31 December 1994 is a part of the WTO family of agreements. The original GATT of 1947 along with all amendments till 31 December 1994 is commonly referred to as GATT 1947.

GATT 1994 comprises the following: (1) GATT 1947; (2) Decisions taken under GATT 1947 up to 31 December 1994; (3) Understandings reached in the Uruguay Round in six areas; and (4) Tariff schedules and the manner of implementation of these schedules as agreed in the Uruguay Round.

4. What Are the Basic Principles of the WT

Although the WTO agreements are lengthy and complex because they are legal texts covering a wide range of activities, two fundamental principles run through all of these documents – 'Most Favoured Nation' (MFN) Treatment and National Treatment. These principles are at the foundation of the multilateral trading system.

MFN Treatment: Under the WTO agreements, countries cannot normally discriminate between their trading partners. A grant of a special favour (such as a lower customs duty rate for one of their products) to one country has to be extended to all other WTO members. This principle is known as MFN treatment. It is so important that it is the first article of the GATT, which governs trade in goods. MFN treatment is also a priority in Article 2 of the General Agreement on Trade in Services (GATS) and Article 4 of the Agreement on Trade-Related Aspects of Intellectual Property Rights (TRIPS), although in each agreement the principle is handled slightly differently. The MFN rule says that every time a country opens up a market for a particular good or service, for example by lowering a trade barrier, it has to do the same for all its trading partners.

Some exceptions are allowed. For example, countries can set up a free trade agreement that applies only to goods traded within the group—discriminating against goods from outside, or they can give developing countries special access to their markets, or they can raise barriers against products that are considered to be traded unfairly from specific countries. In services, countries are allowed to discriminate in limited circumstances, but the agreements permit these exceptions only under strict conditions.

National Treatment: Imported and locally-produced goods should be treated equally, at least after the imported goods have entered the market. The

same should apply to foreign and domestic services and to foreign and local trademarks, copyrights and patents. This principle of 'national treatment' (giving products of other countries the same treatment as one's own products) is also found in all the three main WTO agreements (Article 3 of GATT, Article 17 of GATS and Article 3 of TRIPS), although once again the principle is handled slightly differently in each of these.

National treatment applies only once a product, service or item of intellectual property has actually entered a country's market. Therefore, charging customs duty on an import is not a violation of national treatment even if locally produced products are not charged an equivalent tax.

Who is a member of the WTO? How do countries accede to the WTO?

The WTO has 148 members, together accounting for 90 percent of world trade. These members are mostly country governments, but can also be customs territories. Only a quarter of the countries are developed countries. The rest are developing countries, least developed countries (LDCs) and customs territories. There are nearly 30 applicants negotiating to become members.

Customs territories are countries working together to form alliances such as customs unions, free trade areas or common markets. Often they have just one spokesman or negotiating team representing the alliance at the WTO. The biggest such group is the European Union (EU) and its 25 member-states. The EU is a WTO member in its own right, even though each of its member countries is also a member of the WTO.

Any country or customs territory, which is autonomous as far as trade is concerned, can join the WTO. The application process has four stages:

(1) First, the government applying for membership has to describe all aspects of its trade and economic policies that have a bearing on WTO agreements. This is submitted to the WTO and examined by a working party made up of all WTO members.
(2) After policies have been examined, parallel bilateral talks begin between the prospective new member and individual countries. These talks cover tariffs and access to markets, and other policies in goods, services and intellectual property rights (IPRs). Though they are negotiated bilaterally, a new member's commitments apply equally to all WTO members under normal non-discrimination rules.

(3) Once the working party has completed its examination of the applicant's trade system, and the bilateral negotiations are complete, the working party finalises the terms of membership in a draft membership treaty (called the 'protocol of accession') and lists the new member's commitments.

- Finally, the overall report, the protocol and lists of commitments are presented to the WTO General Council. If a majority of WTO members vote in favour of the country joining the WTO, the country can sign the protocol and 'accede' to the WTO.

In many cases, the country's own government has to ratify the agreement before membership is complete. This whole process can take more than 10 years; Nepal's membership took 12 years.

Many countries become 'observers' at the WTO proceedings before they become members. Apart from the Vatican, observer nations must start the process of becoming members within five years of becoming observers.

Current observer countries include Afghanistan, Algeria, Belarus, Bhutan, Bosnia and Herzegovina, Ethiopia, Iran, Iraq, Kazakhstan, Lao People's Democratic Republic, Lebanese Republic, Libya, Russian Federation, Saudi Arabia, Serbia, Seychelles, Sudan, Tajikistan, Tonga, Ukraine, Uzbekistan, Vietnam and Yemen.

The main benefit of membership in the WTO is the right not to be discriminated against, in its trade with other members of the WTO. This principle of non-discrimination in trade is fundamental to the WTO and set down in the MFN and national treatment clauses, the two basic principles of the WTO.

In case a country is not a member of the WTO, it has to conduct international trade with other countries under bilateral agreements which may need to be renewed periodically and whose terms and conditions may also change. Membership of the WTO ensures that the country concerned undertakes international trade transactions with other WTO member-countries under a predictable and stable trade regime.

Another important benefit of membership is that it gives a country the right to take part in WTO meetings and trade negotiations, and therefore the opportunity to shape future international trade to its advantage.

Private businesses, NGOs or advocacy and lobby organisations are not a part of the WTO and do not officially participate in WTO negotiations. All businesses and non-business organisations have to work through their own governments if they want to change any of the agreements.

However, subject to certain conditions, NGOs are permitted to submit 'amicus briefs' (friends-of-the-court submissions) to dispute settlement panels.

The WTO agreements cover goods, services and intellectual property. They spell out the principles of liberalisation and the exceptions permitted. They include commitments of individual countries to lower customs tariffs and other trade barriers, and to open services markets and keep them open. They set procedures for settling disputes. They prescribe special treatment for developing countries. They require governments to make their trade policies transparent by notifying the WTO about laws in force and measures adopted, and through regular reports by the WTO Secretariat on their trade policies. . These agreements are often called the trade rules of the WTO, and the WTO is often described as 'rules-based', a system based on rules. But it is important to remember that the rules are actually agreements that governments have negotiated.

The basic structure of the WTO agreements is shown in the table below.

Umbrella	**Agreement Establishing WTO**		
	Goods	Services	Intellectual property
Basic principles	**GATT**	**GATS**	**TRIPS**
Additional details	Other goods agreements and annexes	Services annexes	
Market access commitments	Countries' schedules of commitments	Countries' schedules of commitments (and MFN exemptions)	
Dispute settlement	**Dispute Settlement**		
Transparency	**Trade Policy Reviews**		

9 How are disputes settled in the WTO? And what happens if a country does not abide by a WTO agreement.

Dispute settlement is the central pillar of the multilateral trading system. Without a means of settling disputes, the rules-based system would be less effective because the rules could not be enforced. The dispute settlement procedure of the WTO underscores the rule of law and makes the trading system secure and predictable. The system is based on clearly-defined rules, with timetables for completing a case. First rulings are made by a panel and endorsed (or rejected) by the full membership of the WTO. Appeals based on points of law are allowed.

The reports of the panel and Appellate Body are adopted by the Dispute Settlement Body (DSB) of the WTO through the process of reverse consensus, whereby a report is adopted unless all members agree to reject the report. In case the panel/Appellate Body concludes that the country complained against has not complied with its WTO obligations, the country is required to conform to the relevant obligations within a 'reasonable period of time'. In case the defaulting country is unable to comply with the WTO obligations within the 'reasonable period of time', the complaining country may retaliate against the defaulting country, after obtaining authorisation from the DSB. In certain circumstances, the parties to the dispute may enter into a compensatory agreement pending compliance with the panel/Appellate Body recommendations.

10. How can I obtain more information on the activities of the WTO?

The WTO maintains a website at http://www.wto.org. It contains a wealth of information about WTO agreements and the structure and work of the organisation. A number of WTO documents can be downloaded from the website. In addition, the Information and Media Relations Division of the WTO Secretariat is available to answer requests for information from the general public and media. The Information and Media Relations Division can be contacted at:
WTO, Centre William Rappard, 154 rue de Lausanne,
1211 Geneva 21, Switzerland, tel: (41 22) 7395111,
fax: (41 22) 7395458.

Section II

Glossary

Ministerial Conference: A Ministerial Conference is the highest authority in the World Trade Organisation (WTO) structure and takes decisions on all matters under multilateral trade agreements. Since its inception in 1995, the WTO has held five Ministerial Conferences – in 1996 at Singapore, in 1998 at Geneva, in 1999 at Seattle, in 2001 at Doha and in 2003 at Cancun. Hong Kong, China is scheduled to host the sixth Ministerial Conference from 13-18 December 2005.

General Agreement on Tariffs and Trade (GATT): One of the three Bretton Woods organisations created after World War II to ensure a stable trade and economic world environment. The International Monetary Fund (IMF) and World Bank are the other two bodies of the Bretton Woods system. GATT functions as the foundation of the WTO trading system, and remains in force, although the 1995 Agreement contains an updated version of it to replace the original GATT 1947. However, GATT as an organisation no longer exists.

Doha Work Programme: The work programme of the WTO members initiated by the Doha Ministerial Declaration is commonly referred to as the Doha Work Programme. The Doha Ministerial Declaration and the WTO General Council Decision of 1 August 2004 constitute the framework of the current trade negotiations. The Doha Declaration prescribed only broad objectives in agriculture and Non-Agricultural Market Access (NAMA). The decision of 1 August 2004 decision prescribes specifics in terms of directions of commitments and alternative approaches to achieve the objectives.

Plurilateral Agreements: While WTO members subscribe to all WTO agreements after the Uruguay Round, there remained four agreements, originally negotiated in the Tokyo Round, which had a narrower group of signatories and are known as 'plurilateral agreements'. The four agreements are on (1) trade in civil aircraft, (2) government procurement, (3) dairy products and (4) bovine meat.

Agreement on Trade-Related Intellectual Property Rights: Sets the minimum level of protection to various forms of intellectual property. TRIPs deals with copyright and related rights (i.e. rights of performers, producers of sound recordings and broadcasting organisations); geographical indications (including appellations of origin); industrial designs; integrated circuit layout-designs; patents (including the protection of new varieties of plants); trade-marks; and undisclosed or confidential information (including trade secrets and test data). TRIPs also specifies enforcement procedures, remedies and dispute resolution procedures.

Trade-Related Investment Measures: Governments may impose conditions on investment, some of which could be trade-related. For example, a government may prescribe that investments can be made in a firm, provided the firm exports certain proportion of its production. This is a trade-related condition.. The Agreement on Trade-Related Investment Measures (TRIMs) covers conditions on investment related to trade in goods.

GATS: General Agreement on Trade in Services (GATS), which provides a framework to regulate trade in services.

General Council: The day-to-day work of the WTO in between Ministerial Conferences is handled by the General Council comprising all the WTO members. The General Council acts on behalf of the Ministerial Conference on all WTO affairs. It meets as the DSB and the Trade Policy Review Body to oversee procedures for settling disputes between members and to analyse their trade policies.

Single Undertaking: The principle in WTO multilateral agreements meaning almost every item of the negotiation is part of a whole and indivisible package and cannot be agreed upon separately. Nothing is agreed upon until everything is agreed upon. The current negotiation on the Dispute Settlement Understanding of the WTO is outside the single undertaking.

Enabling Clause: The Enabling Clause, officially called the 'Decision on Differential and More Favourable Treatment, Reciprocity and Fuller Participation of Developing Countries', was adopted under GATT in 1979 and enables developed-country members to give differential and more favourable treatment to developing countries. The Enabling Clause is the legal basis under the WTO for the Generalised System of Preferences.

Harmonisation Code System (HS Code): A system of progressively specific identifiers for a commodity. For example, concentrated frozen apple juice is assigned a 10-digit identifier. This number is an aggregate of a series of

codes starting with a broad category assigned a two-digit identifier described as Preparations of Vegetables, Fruit, Nuts etc. It is then assigned a four-digit identifier described as fruit juices and vegetable juices etc. The six-digit identifier is described as apple juice.

Applied Tariff: Actual rate of customs tariff levied on a product.

Cairns Group: Group of nations that export agricultural products lobbying for liberalisation in agricultural trade. Formed in 1986 in Cairns, Australia. Current membership is of Argentina, Australia, Bolivia, Brazil, Canada, Chile, Colombia, Costa Rica, Guatemala, Indonesia, Malaysia and New Zealand.

Doha Round: Ongoing multilateral trade negotiations that started in Doha, Qatar, in 2001. The agenda agreed to here, called the Doha Work Programme, is designed to meet the needs of developing countries.

Hong Kong Ministerial: Sixth Ministerial Meeting of the WTO to be held in Hong Kong, during 13-18 December 2005.

Import Tariff: Tariff a country levied on imports by a country.

July Package: The Doha Declaration prescribed only broad objectives in certain areas like agriculture and NAMA. The Decision made on 1 August 2004 by the General Council prescribes specifics in terms of directions of commitments and alternative approaches to achieve the objectives, and is commonly referred as the July package

Market Access: Permission to a foreign product to enter a domestic market and compete with a domestic product on a non-discriminatory basis.

Rules of Origin: Set of rules that determine the country in which a product is deemed to have originated.

Subsidies: Financial contribution by a government to support a particular business or activity.

Section I

Frequently Asked Questions (FAQs)

Yes, trade in agriculture can play a very critical role in poverty reduction because a huge population across the globe depends largely on agriculture. According to the World Bank about 40 to 60 percent of the poorest in the developing world live in rural areas and are dependent primarily on agriculture for their livelihood. Though a majority of agricultural producers in poor countries produce for self-consumption and the domestic market, a significant proportion of farmers in developing countries produce for the export market. These export markets can stimulate production in developing countries and hence enable the farmers of these countries to earn more. The share of developing countries in agricultural products has improved from 39 percent to 42 percent and has increased in value terms from US$ 83 billion to US$ 147 billion between 1990-2003. An increase of just one percent in world export market share could translate into a one-fifth increase in average income and an increase in foreign exchange earnings by US$ 70 billion per year in Sub-Saharan Africa.

Further, there are many countries in the Asia Pacific region and South Asia (Thailand, Vietnam and India) whose agricultural exports are more than agricultural imports (net exporters of agricultural goods). These developing countries have historically been competitive in agricultural trade and share more than 50 percent of rice trade. Vietnam is one of the developing countries that reduced poverty and improved health standards. This bears a strong correlation with trade gains in agriculture. In these countries, a significant proportion of the population is involved in agricultural production. Hence, increasing international trade and thriving export markets could act as stimulants for the growth and development of the farmers in these countries.

Distortions in trade are caused by policies and practices in global trade which

purposively change the volume and price of the commodity in trade. During the Uruguay Round, two aspects of trade intervention were considered distortionary: (1) market barriers that insulate countries from global competition and (2) subsidies that reduce the cost of production and transaction of traded commodities, thereby depressing global prices artificially. The Agreement on Agriculture (AoA) came up with 'commitments' to remove various types of distortions and there was improvement in market access with most countries tariffying their import regimes and many countries extended minimum market access. In terms of removing subsidies there was an effort by all countries to notify the extent of subsidies each country gives in agriculture and follow the schedule of commitment. And in reality both these distortions prevail in the global trade scenario. In the latest Common Agricultural Policy (CAP) the European Union (EU) has earmarked support of US$ 51 billion to producers. The US has earmarked support of US$ 4.7 billion for cotton only. These kinds of distortions reduce the comparative advantage of natural growers, which are predominantly developing countries. It is estimated that for sugar alone such distortions can cost Brazil US$ 495 million, South Africa US$ 151 million and Thailand US$ 60 million of foreign exchange. It is estimated that if these two distortions, including the export subsidies, are removed, world price can increase by 12 percent.

On the contrary, in food-importing developing and least developed countries (LDCs) reduced subsidy will definitely impact welfare because of increased food prices.

Some of the subsidies provided by developed countries like the US and the EU are in contravention of the rules of the AoA. The dispute settlement body of the World Trade Organisation (WTO) has ruled many agricultural subsidies given by developed countries to be illegal. For instance, Brazil had challenged the subsidies provided by the US to its cotton farmers to the tune of US$ 3.2 billion in the dispute settlement body of the WTO, which ruled them to be illegal. Also, export credit subsidies of about US$ 1.6 billion given by the US to its cotton growers were inconsistent with the AoA and hence illegal.

The AoA allows countries to provide non-trade distorting subsidies to their farmers called Green Box subsidies, which include subsidies such as direct payments to the farmers or subsidies for environmental purposes and many

other research and investment subsidies that are exempt from any reduction commitment.

All this needs to be seen in the right perspective. Subsidies, whether they are for environmental or any other purpose, puts the person receiving it in a better position compared to the person not receiving it. Most farmers in developing countries do not get these subsidies because developing countries lack the resources to support their farmers. Hence, the farmer of a developed country having access to any kind of subsidy is certainly better placed in the global trade regime than the farmer of a developing country.

Domestic support has been classified into three groups depending on their trade-distorting impact and their effect on the amount of production. This helps determine whether they need to be reduced and whether action can be taken against them under the WTO dispute settlement mechanism.

The Amber Box contains subsidies that significantly distort trade and affect the amount of production. They must be reduced, and are open to legal challenge by other WTO members.

The Blue Box (Article 6.5 of the AoA) allows countries unlimited spending for direct payments to farmers if the payments are linked to programmes that limit the amount of production. These are open to challenge by other WTO members, but are exempt from the reduction obligation.

The Green Box contains support that is assumed to have no effect on production. This includes payments linked to environmental programmes, pest and disease control, infrastructure development and domestic food aid. It also includes direct payments to producers if those payments are not linked to current production. Green box subsidies are not subject to the reduction obligation.

The above colour nomenclature is not mentioned in the AoA. However, it is commonly used.

The average level of tariff is very low in some of the advanced countries but these have not helped the developing countries gain share in these markets for two reasons.

1. Concealed tariffs: Import duties in some advanced countries range from less than 5 percent to zero duty on many product lines that are uncompetitive and maintain high peaks to the level of 250 percent on specific products, making the product price increase more than three times inside the country. There is high prevalence of non-*ad valorem* duties or specific duties in some advanced countries and these are excluded in the calculation of average tariff. These duties are difficult to interpret in *ad valorem* terms. The minimum quota access has two levels of tariff and the dispersion between them is large. On an average, the higher quota tariff is more than three times the lower quota tariff. A similar level of dispersion exists between raw and processed agricultural products and limits the value addition prospects of developing countries.
2. Non-trade measures like Non-Tariff Barriers, sanitary and phytosanitary (SPS) measures and quality standards restrict the entry of agricultural commodities into many developed countries and low tariff levels yield no concessions. Some of these standards have been widely criticised for their variability and for being higher than are internationally acceptable.

With the existing level of transparency on tariff structure it takes more than just low tariffs to gain market access in some developed countries.

[illegible] in the Doha Development Agenda (DDA) and how can it [illegible] development issues of agricultural trade?

The negotiation round undertaken at the Ministerial Round at Doha ended by taking effect as the DDA. It was a landmark achievement and built on the long- term objective of the AoA to establish a fair and a market-oriented trading system through a programme of fundamental reforms, keeping in view the provisions for special and differential treatment for developing-country members to pursue agricultural policies that are supportive of development goals, poverty reduction strategies and food security and livelihood concerns.

The DDA came up with clear-cut formulas on reduction of both subsidies and tariffs within a specific time- frame and pledged to give special concessions and differential treatment to cotton-growing LDCs. These initiatives can bring revenue dividends to developing countries with additional time to adjust their economy to compete effectively in the global agricultural trade. But all depends on how these formulas are implemented with most developed countries hesitant to reduce their subsidy levels and developing countries reluctant to reduce their agricultural tariff levels.

The WTO provides the institutional framework for countries to seek elimination of, or imposition of additional disciplines on trade- distorting practices of developed countries in agriculture that are adversely affecting the interests of developing countries like India. Removing agriculture from the WTO would deprive the developing countries of a multilateral framework for seeking reforms in agriculture trade in developed countries. If agriculture is removed from WTO disciplines, developed countries would be free to continue with their existing trade-distorting practices and could introduce further distortions through measures which may otherwise not be permitted. It is, therefore, in the interest of developing countries to continue to seek further disciplines on agricultural practices in developed countries within the framework of the WTO.

High levels of domestic support to agriculture in developed countries adversely affect the interests of developing countries in many different ways. These may include:

- Severely limiting access of developing country agricultural exports to developed countries, as heavy subsidies lead to depressed prices with which developing countries are not able to compete.
- Forcing farmers from developing countries to match developed-country subsidised prices for the products concerned, thereby reducing unit-value realisation.
- Possibiy impeding or displacing developing-country agricultural exports to third-country markets.
- Generating large price volatility in world markets, while farmers in developed countries are sheltered from almost all possible risks because of price support and other subsidies, farmers in developing countries bear the burden of amplified price volatility.
- Depressing domestic prices of agricultural products in developing countries.
- Inducing farmers of developing countries to over-invest in least-subsidised products in developed countries, such as coffee and cocoa, leading to excessive supply and depressed prices for these crops. In the absence of protection in developed countries, such diversification in developing countries would be feasible.

The AoA has categorised domestic support measures into three: the 'market distorting' measures that have to be disciplined and reduced (Amber Box), and the supposedly less- or non-distorting subsidies that do not have to be disciplined or reduced and in fact can be increased without limit (Blue Box and Green Box). There has been a shift in the developed countries in their domestic agriculture subsidies from the Amber Box, which are subject to reduction commitments, to Green Box and Blue Box subsidies, which are exempted from reduction commitments. This has enabled the developed countries to increase their overall level of domestic support. This practice is commonly referred to as 'box-shifting'.

Under the Doha Ministerial Declaration of 14 November 2001, countries have committed themselves to comprehensive negotiations, *inter alia*, in agriculture aimed at

- substantial improvements in market access, implying reduction of tariffs and liberalisation of tariff rate quotas,
- reduction of and phasing out export subsidies and
- substantial reductions in trade-distorting domestic support.

The Doha Ministerial Declaration specifies that special and differential treatment for developing countries shall be an integral part of all elements of the negotiations. During the negotiations, account would be taken of the development needs of developing countries, including food security and rural development. Further, non-trade concerns would also be taken into account during the negotiations.

The July 2004 Framework is commonly used to refer to the decision of the WTO General Council, adopted on 1 August 2004. This decision builds on the Doha Ministerial Declaration and provides the guidelines and principles relating to technical details in respect of various elements for the conduct of further negotiations.

Under the July Framework, export subsidy and equivalent measures like export credit, export credit guarantees and insurance programmes with a repayment period of beyond 180 days are to be eliminated by a date to be stipulated. Such measures with lesser repayment periods are to be brought under agreed disciplines or are to be eliminated by the stipulated date. Trade distorting practices relating to state trading enterprises (e.g. subsidies given to them or by them, government financing, underwriting of losses etc.) are to be eliminated by the stipulated date. Food aid provisions are to be brought under agreed disciplines or eliminated by the stipulated date.

The July 2004 Framework of the WTO envisages two broad sets of disciplines on trade- distorting support – at the overall level of trade- distorting subsidies and of separate disciplines for each of the three elements comprising trade-distorting support.

At the overall level, the AMS, *de minimis* support and Blue Box subsidy taken together, will be 'substantially' reduced. As the first installment of cut, the total of these three elements will not exceed 80 percent of the base level. (However, countries that allocate almost all *de minimis* support to subsistence and resource-poor farmers are exempt from reducing *de minimis* support).

Separate disciplines for reduction/capping are envisaged for AMS (aggregate measurement of support; Amber Box), *de minimis* and Blue Box. The AMS will be reduced 'substantially' using a tiered approach in which members having a higher total AMS will make greater reduction. *De minimis* support will be reduced as negotiated. Blue Box subsidy will not exceed five percent of agricultural production of a member and members in accordance with the criteria to be negotiated can use it.

The July 2004 Framework of the WTO envisages that the criteria for Green Box subsidies will be reviewed and clarified so as to ensure that these subsidies have no, or at most minimal, trade-distorting effects or effects on production. No reduction commitment is envisaged on Green Box subsidies.

Under the July Framework, developed and developing countries may designate an appropriate number of tariff lines as sensitive. It is likely that sensitive countries may have the flexibility to deviate from the tariff reduction formula. Substantial improvement in market access for sensitive products will be achieved through combinations of tariff reductions and tariff rate quota commitments, while reflecting the sensitivity of the product concerned.

The July Framework has recognised that developing countries have the flexibility to designate certain products as SPs based on the criteria of food security, livelihood security and rural development needs. Products designated as SPs would be eligible for more flexible treatment, the exact nature of which would be decided during the ongoing negotiations.

Under the existing provisions of the AoA any country, developing or developed, to restrict the imports of agricultural products, cannot apply quantitative restrictions. During the ongoing negotiations, some developing countries, including India, have sought a special safeguard mechanism (SSM) to be used by developing countries for addressing situations of import surges or swings in international prices of agricultural products. Apart from additional duties, these countries have sought the flexibility to impose quantitative restrictions under the special safeguard mechanism.

Under the July 2004 Framework, tariff reductions will be made from bound rates (and not applied rates). In India, there is a considerable gap (also referred to as 'tariff water') between bound tariff and applied tariff in most agriculture tariff lines. Unless the tariff reduction formula results in very sharp reduction in bound rates, India may not have to significantly reduce its applied tariff on most agricultural products.

However, there are a few tariff lines with no tariff water as the applied tariff is at the level of the bound rate. These include edible oils (soyabean, olive and mustard), rice, wheat, maize, garlic, peas, oranges, grapes, grapefruit, apples etc. Unless these tariff lines are subject to flexible treatment as SPs, India would be required to reduce the applied rate of tariff on these tariff lines.

The actual extent by which the applied tariffs would need to be reduced would depend ultimately on the formula adopted and on the flexible treatment to SPs agreed upon during the negotiations.

Section II

Glossary

Agreement on Agriculture (AoA): One of the agreements of the Uruguay Round of negotiations that led to the establishment of the World Trade Organisation (WTO) in 1995. The AoA became operational with the establishment of the WTO from 1 January 1995. It brought agriculture under the purview of substantive multilateral trade rules for the first time. Developed and developing countries got six and nine years respectively for the implementation of commitments under the AoA. The AoA comprises domestic support, market access and export competition.

The AoA also contains provisions for reviewing the agreement. Presently, the AoA is being re-negotiated on the terms agreed by the WTO member countries at the Fourth Ministerial meeting at Doha in 2001 and the July 2004 Framework decision adopted by WTO's General Council on 1 August 2004.

Subsidy: Financial contributions by the government (e.g. direct transfer of funds, potential direct transfers of funds, revenue foregone) covering some costs of doing business or a particular activity. In the agricultural context, it could mean certain financial benefits to farmers through direct payments, agricultural input subsidies, market price support, decoupled income support, income insurance and income safety nets, payment for relief from natural disasters, structural adjustment assistance etc. among other forms of support.

Aggregate Measurement of Support (AMS): Quantification of aggregate value of domestic support provided by governments to specific products as well as non-specific products. It includes four main elements – (1) market price support which is based on the gap between the fixed external reference price and applied administered price; (2) direct payments dependent on price gap; (3) direct payments not dependent on price gap; and (4) other measures.

Amber Box: Denotes those domestic support subsidies that are considered to distort production and trade and are subject to reduction commitments under

the AoA. These subsidies include market price support, various kinds of payments, input subsidies etc. These subsidies are subject to reduction based on a formula for the 'Aggregate Measurement of Support'.

Blue Box: Denotes those domestic support measures that allow countries to make direct payments to agricultural producers for limiting the production on fulfillment of certain conditions. The level of payment should be based on fixed areas and yields or per head of livestock. This support is unlimited and need not be reduced or eliminated. In the ongoing negotiations, certain developed countries want to retain the Blue Box, whereas many developing countries are calling for complete elimination of the Blue Box subsidies.

***De minimis*:** The maximum ceiling on trade distorting domestic support that is not subject to reduction commitment. In other words, if countries provide trade- distorting domestic support to their farmers below this ceiling it will not be subject to reduction using the AMS reduction formula. This ceiling or threshold is for both general non-product specific support to agricultural programmes and product-specific agricultural programmes. The *de minimis* level for developed countries is five percent of the total value of production for general non-product specific support and five percent of the value of each crop for product specific support. Suppose the total value of production of agriculture in a developed country is 100 units. In such a case, domestic support up to five units is permissible and will not be subjected to reduction. In this case five units is the *de minimis* level of support. The *de minimis* level for developing countries, in this case, would be ten units.

Green Box: Domestic support subsidies covered by Annexure 2 of the AoA that are exempted from reduction commitments. Further, to qualify as a Green Box subsidy it must have no, or at most minimal, trade- distorting effects or effects on production. These subsidies should be government- funded and should not involve price support to producers. In other words, Green Box subsidies are permissible subsidies, as they are considered to have minimal or no trade distorting effects or effects on production. It mainly includes subsidies linked to (1) general services including research, pest and disease control, training services, marketing and promotion services and infrastructural services, (2) environmental programmes, (3) domestic food aid, (4) public stockholding for food security purposes and (5) decoupled income support that is not related to the type or volume of production, prices etc. The US and the EU are the main users of Green Box subsidies. The implementation of the AoA has witnessed many instances where the subsidies presently classified as Green Box are actually found to be distorting trade. The examples of such subsidies are direct payment to producers, decoupled income support and government financial support for income insurance.

Market Access: Permission to a foreign product to enter into a domestic or local market and to compete with the comparable domestic product on a non-discriminatory basis. In other words, it is the willingness of government to allow imported goods and services to compete with similar domestic goods and services.

Special Safeguards (SSG): The flexibility available to certain WTO member countries to impose additional duties on imported agricultural products in case there is (1) an increase in import of these commodities into their territories beyond the prescribed level or (2) a fall in the price of imports below a prescribed level. However, all countries cannot use the special safeguard measure. It can be used only by those countries that 'tariffied' i.e., converted their non-tariff barriers such as variable levies and quantitative restrictions into tariffs. This can be used mainly by developed countries and certain developing countries. Till date, only 21 developing countries have the right to use special safeguards in agriculture. Special safeguard measures are different from safeguard measures under the Agreement on Safeguards, which can be used by all countries.

Special Safeguard Measures (SSM): During the ongoing negotiations, some developing countries, including India, have sought a special safeguard mechanism to be used by developing countries for addressing situations of import surges or swings in international prices of agricultural products. Apart from additional duties, these countries have sought the flexibility to impose quantitative restrictions under the special safeguard mechanism. This proposed SSM is different from the existing provision of SSG in the AoA.

Tariff: A tax or levy imposed at the (national) border on imported products. Tariffs can be imposed in two ways. First is the *ad valorem* tariff, where the tariff rate is based on the value of the import i.e., it is based on the price of the imported product. Second is the specific tariff rate, where tariff rates are imposed on the basis of weight/volume or number of items of the imported product irrespective of the price of the product.

Tariff Rate Quota: A two-level tariff structure, with lower tariff applicable on in-quota imports and higher tariff applied on out-of-quota imports. Simply put, it refers to a trading mechanism that provides for the application of a customs duty at a certain rate to imports of a particular good upto a specified quantity (i.e., in-quota quantity), and at a different rate to imports of that good that exceed the specified quantity. This method of tariffication has been criticised for its poor administration and alleged to be discriminatory and non-transparent.

Bound Tariff: Ceiling tariff or maximum tariff that can be levied on a particular imported product. For instance, if an imported product has a bound tariff rate of 100 percent, the maximum tariff that can be levied on this particular product is 100 percent. Countries can levy tariff rates less than or equal to 100 percent, but not more than 100 percent on this particular product.

Applied Tariff: Tariff that is actually levied on an imported product.

Water in the Tariff: The difference between bound tariff rate and applied tariff rate.

Quota Rents: The difference between the world price and the import price including the out-of-tariff.

Unbound Tariff Line: A tariff line or product for which there is no ceiling or maximum tariff rate that can be levied. In other words, if a tariff line is unbound, the applied tariff rate can go to any level. Under the AoA, WTO members bound tariffs on all agriculture tariff lines.

Tariffication: The process of converting the non-tariff measures that existed during the Uruguay Round of negotiations into tariffs.

Tariff Reduction Formula: This refers to different approaches or methodologies for cutting or reducing tariff rates on different agricultural products or tariff lines.

Uruguay Round Formula: This formula or approach to cut tariff rates was adopted during the Uruguay Round of negotiations. This is a linear reduction formula, requiring an average total of 36 percent (24 percent for developing countries) and a minimum of 15 percent (10 percent for developing countries) in each tariff line. This formula does not lead to steep reduction in the tariff rates.

Swiss Formula: This formula aims at harmonisation of tariffs (bringing all tariffs to the same level) between member countries of the WTO. It cuts higher tariffs more steeply than the lower tariffs. It does not support the cause of developing countries and LDCs as most of these countries have high tariff rates. Adopting the Swiss formula would lead to a steep reduction in their tariff ,exposing them to market volatilities.

Banded Formula: According to this formula, all tariff lines are to be divided into different bands or categories and then each band or category is to be subjected to tariff reduction by applying the Uruguay Round formula.

Blended Formula: This formula mixes the Uruguay Round formula and the Swiss formula. According to this formula, the tariff lines of a particular country are to be divided into three different categories. Of the three, one category or portion would be subject to the Swiss formula, another category or portion of tariff line would be subjected to the Uruguay Round formula and the tariff on the third category of tariff lines would be eliminated.

Tiered Formula: This approach was adopted by the WTO General Council on 1 August 2004 as a part of the framework for establishing modalities for future negotiations. According to this, the tariff lines are to be divided into different bands or categories. Bands or categories comprising of higher tariff rates would be subjected to steeper reductions. However, the number of bands, thresholds for each band and the extent of tariff cut in a particular band are yet to be decided.

Tariff Escalation: Increase in tariffs with the degree of processing of a given commodity. For instance, Canada has a tariff rate of 8.5 percent on raw sugar. However, the tariff rate escalates to 107 percent for refined sugar.

Export Subsidies: These are special monetary incentives, such as cash payments, extended by governments to encourage increased sales abroad, often used when a country's domestic price for a good is higher than the world market price. These are usually payments made by governments that are dependent or contingent on export performance. Export subsidies are particularly trade distorting.

Export Credit: These are payments made by governments to companies to underwrite their cost of doing business on commercial terms. This helps the domestic company to do export more at the cost of the government.

Non-Trade Concerns: Those aspects of agriculture that are not related to trade such as food security, rural development, employment protection, environmental protection etc. Agriculture in developing countries and in LDCs is a livelihood issue more than a trade issue.

Peace Clause: Article 13 (Due Restraint) of the AoA protects the country using certain subsidies from being challenged under the WTO agreement and/or imposition of countervailing measures. The Peace Clause expired in the year 2003.

G-20: An alliance of countries in the agriculture negotiations in the WTO, formed in August 2003, that comprises some developing country members of the agricultural exporting countries from the Cairns Group and some other developing countries, including India, which have defensive interests in agriculture.

G-33: An alliance of 42 developing countries, which calls for safeguarding of food and livelihood security and rural development needs through SPs and SSMs.

Section I

Frequently Asked Questions (FAQs)

What is Non-Agricultural Market Access (NAMA) negotiations? How is it related to development?

The Non-Agricultural Market Access (NAMA) refers to a process of negotiations mandated by the Doha Ministerial Declaration (2001), aiming to liberalise trade in industrial and consumer products, in particular in products of export interest to developing countries. The negotiations cover all products not covered under the Agreement on Agriculture (AoA). The products covered are essentially industrial goods but also include natural resources like fisheries, gems and minerals. These negotiations aim to reduce border measures to trade, especially tariffs, and other barriers to market access for industrial exports.

NAMA negotiations are closely related to development because it works towards setting standards on the degree to which a country can manoeuvre its tariff policy. Tariff policy in turn is an integral part of the development strategy of any developing country or least developed country (LDC). A strong industrial base is essential to economic development. Tariffs allow countries to control the price, speed and volume at which imports enter their domestic markets to protect local production until the time they are ready to compete. Most present day developed economies make extensive use of tariffs to allow their domestic industries to grow; in fact they continue to rely on tariff peaks and tariff escalation to protect certain sectors. Tariff policy has significant implications for industrialisation, employment and poverty.

Any major reduction in tariff rates can not only impose harsh adjustment costs but also lead to conditions like 'de-industrialisation'. For instance, Senegal experienced large job losses when its average effective rate of protection was reduced drastically from 165 percent in 1985 to 90 percent in 1988. Zambia had a similar experience after it made deep tariff reductions in reforms that it started in 1991.

The implications of the NAMA negotiations on development, however, go beyond concerns that relate to the preservation of the industrial policy space. NAMA negotiations provide an opportunity for developing countries to have an improved access to developed countries, especially in sectors that are employment-intensive.

It must be noted that imports can play a positive role in industrial development. Open borders allow goods that are not produced locally to enter the local market at a lower cost. Competition from imports can also play an important role by stimulating innovation and more efficient production by local firms.

2. Can better market access to non-agricultural goods in the export market foster development?

Yes, better market access to non-agricultural goods in the export market can play a major role in fostering development in developing countries and LDCs. Manufacturing contributes to more than 60 percent of the total exports of developing countries. Improved market access in employment intensive sectors can expand employment and/or increase wages.

Some of the most employment intensive manufacturing sectors in developed countries are also the most protected sectors. The existence of disproportionate tariffs in these goods can be cited with an example. In the US, shoes and clothing imports account for almost half the tariff revenue collected, even though they account for just 6.7 percent of the value of total US imports.

Many developing countries and LDCs are involved in the production of labour intensive manufactured goods such as textile and clothing, leather, footwear and marine products.

The high protection in textiles and apparel means that they are second only to agriculture in providing potential gains from liberalisation. These manufacturing and industrial activities provide employment to a large number of people in developing countries. Of all apparel exports, 70 percent comes from developing countries, making it a vital source of employment, income and foreign exchange earnings. The textiles and apparel industry in India provides employment to 38 million people and is the largest employer after agriculture. In Bangladesh, the textiles and clothing sector employs more than one million women workers.

Better market access to non-agricultural goods can also play an important role in fostering development by boosting capital investment in the domestic industry. While domestic demand in developing countries may be inadequate

to warrant higher investment in capital upgradation, access to international markets may play a crucial role in helping developing countries continue with capital investment.

Yes, there are numerous examples to show that better market access to non-agricultural goods has fostered development. Exports of labour intensive manufactured goods such as textiles and clothing, footwear and electronics were one of the most powerful forces that drove poverty reduction in East Asia. Exports created demand for goods produced in labour intensive manufacturing industries, which in turn created demand for labour and increased real wages. In the mid-1970s, six out of ten people in East Asia lived in extreme poverty. This ratio reduced to less than two by the end of 1990s. Production for export markets in these countries also generated resources to import inputs and technologies required for sustained growth.

India has gained significantly in the textiles and clothing sector. Exports constitute roughly 50 percent of the total production of textiles and garments. The benefits of multilateral liberalisation to the Indian textiles and clothing industry under the Uruguay Round have been palpable. Exports of textiles have increased 143 percent in the period 1995-96 to 1999-2000. Correspondingly, the employment has increased by about 113 percent.

Yes, reducing tariff rates in developed countries is a feasible way to increase market access for developing countries. High tariffs in developed countries, especially on products of export interest to developing countries, are major barriers to exports from developing countries. The average tax imposed by developed countries on textiles and clothing imports is about 12 percent compared to 3.8 percent for all industrial products.

For instance, the US imposes an average tariff rate of 3.2 percent on all non-agricultural goods. However, the bound tariff rate on textiles and clothing is 8.6 percent. This is more than two times the average tariff rate for other products. Similarly, the EU has an average tariff rate of four percent on all non-agricultural goods. However, the tariff rate on textile and clothing is 7.9 percent, almost double the average tariff rate for other products.

These high tariff rates restrict the market access of developing-country exports and deny the developmental impact that market access could have provided.

Tariff escalation is also an issue in developed countries: a situation where import duties are structured to gradually rise as the imported products go from their raw state to a more processed form. The EU imposes a tariff of less than four percent on Indian yarn, but the tariff escalates to 12 percent for garments. Tariff escalation as a tariff measure in developed countries discourages the growth of the processing industry in developing countries. This restricts developing countries and LDCs to graduate from merely exporting raw materials to exporting processed and finished goods.

Yes, tariff reduction on some products, especially on those that attract a very high tariff rate in developed country markets, will benefit LDCs. On the other hand, tariff reduction may also hurt the interests of LDCs. This could happen because tariff reduction may erode preferences that LDCs enjoy in the markets of developed countries. Most of the LDCs get access to the markets of developed countries on preferential tariff rates as compared to developing countries. However, if the tariff rates that are applied to all the countries (most favoured nation tariff rate) come down, then the preferential rate at which the products of LDCs get access will get affected. This may adversely affect the interest of LDCs. However, this may not be an appropriate reason to ask for the retention of tariff rates in developed country markets. On the contrary, there is a need to develop compensatory mechanisms for those LDCs whose preference margins will get affected.

Yes, there are other barriers that restrict exports from developing countries and LDCs to developed countries. These barriers are called Non-Tariff Barriers (NTBs). With the process of conversion of quotas and other barriers into tariffs (tariffication), and further reduction of tariffs, NTBs are emerging as new tools for trade protection. The United Nations Centre for Trade and Development UNCTAD-Ministry of Commerce, Government of India - DFID Project on 'Strategies and Preparedness for Trade and Globalisation in India', has classified over 100 such trade measures including measures that control volume of exports, measures that control price, monitoring measures, technical barriers, standards as well as custom and administrative formalities.

The imposition of NTBs or the requirement to fulfill the import standards imposes huge financial burden on developing countries. According to a study by the World Bank, 'Certification costs can be particularly significant for small firms. ISO 9000 certification for a single plant can cost upto US$ 2,50,000 with additional auditing costs after initial approval'. Similarly, tyre certification for exports is an expensive proposition; in some countries it costs a company around US$ 20,000 for the first application and approval. The certificate is valid for a year and US$ 1100 has to be paid for every year for getting the certificate revalidated; in addition, an amount of US$ 600 per day has to be paid for the factory visit of inspectors.

WTO members are engaged in the task of separating valid NTBs from those measures whose primary purpose is to shield domestic producers from foreign competition. The July Framework agreed at the WTO last year recognises that NTBs are an 'integral' part of the NAMA talks. Progress on the reduction of inappropriate NTBs, however, has been very slow.

Yes, there are other development-related linkages of industrial tariffs and negotiations on non-agricultural market access.

Many developing countries and LDCs use tariffs as a major source of revenue. In the Organisation for Economic Cooperation and Development (OECD) countries, tariffs account for a mere one percent of government revenues. However, tariff revenue on average contributes to more than 30 percent of tax earnings in LDCs. In LDCs like Swaziland and Uganda tariff revenue constitutes more than 50 percent of government revenue. For an LDC or low-income developing country, loss of revenue from tariffs can have a significant effect on the ability of the government to provide for essential services and goods for its people.

Hence, it is important to ensure that the tariff reduction process for developing countries is not steep and cushions are built in to compensate for adjustment costs.

The following measures could increase the market access of non-agricultural goods of developing countries and LDCs:

- Developed countries should undertake deep reduction in their tariff rates, especially on products of export interest to developing countries and LDCs, such as textiles, clothing, leather, footwear and marine products.
- A compensatory mechanism should be developed to protect the interests of LDCs, whose preferences in developed country markets will suffer because of reduction in the tariff rates applied on a Most Favoured Nation (MFN) basis.
- Developed countries should substantially reduce the use of NTBs against the exports of developing countries and LDCs. Developed countries should not use NTBs for protectionist purposes. Also, developed countries should not, without adequate justification, impose import standards that are more stringent and stricter than what the international standard-setting organisations have established.
- Developing countries should not be asked to undertake steep and harsh tariff reductions, as this will impose harsh adjustment costs on these counties. Any process of tariff reduction should be gradual and should take into account the developmental concerns of these countries.

5. What happened in industrial tariff negotiations before the Uruguay Round and what was on the table for the Doha Development Round?

Under the General Agreement on Tariffs and Trade (GATT), countries engaged in a series of tariff negotiation rounds to liberalise trade in goods. By the time the WTO (World Trade Organisation) was established in 1995, successive rounds of liberalisation had achieved considerable tariff reduction, particularly among developed countries. In the negotiations, countries made requests and offers to reduce tariffs in particular sectors. GATT members were allowed flexibility to choose which sectors to liberalise and by how much; developing countries were allowed greater flexibility. As a result of the Uruguay Round commitments, India has bound 69.8 per cent of its tariff lines on industrial products.

At the 2001 Doha Ministerial Conference, members agreed to negotiations on NAMA. Since Doha was intended to be a development round, the focus of the NAMA negotiations was on the elimination of tariff peaks and of tariff escalation on products of export interest to developing countries. Governments also agreed that they would take into account the special needs and interests of developing countries. Paragraph 16 of the Doha Ministerial Declaration states:

'We agree to negotiations which shall aim, by modalities to be agreed, to reduce or as appropriate eliminate tariffs, including the reduction or elimination

of tariff peaks, high tariffs, and tariff escalation, as well as Non-Tariff Barriers, in particular on products of export interest to developing countries [...] The negotiations shall take fully into account the special needs and interests of developing and least developed countries, including through less than full reciprocity in reduction commitments [...] To this end, the modalities to be agreed will include appropriate studies and capacity-building measures to assist LDCs to participate effectively in the negotiations.'

On 31 July 2005, the WTO General Council adopted a Framework Agreement that sought to determine the contours of the negotiations till the Hong Kong Ministerial.

The Framework on NAMA is mainly the Cancun Derbez Text, with an additional paragraph in Annex B. Developing countries insisted on this paragraph as an avenue for further negotiations on key issues of concern to them. This new paragraph is supposed to provide for further negotiations on these issues. The additional paragraph most importantly states that Annex B contains the initial elements for future work and adds that additional negotiations are required to reach agreement on the specifics of some of these elements. These elements are:

1. Determination of an appropriate formula to be applied;
2. Special and differential treatment for developing countries;
3. Issues of binding coverage for developing countries;
4. Aspects relating to sectoral issues not only in terms of voluntary or mandatory participation but also in terms of sectoral selection; and
5. Issues relating to adjustment costs, tariff revenue losses and preference erosion.

The three most important features of Annex B pertain to:

1) A formula for reducing tariffs: In contrast to previous industrial tariff liberalisation negotiations under the GATT, this Annex calls for a formula approach to reduce tariffs and states that the negotiating group should continue its work on the non-linear formula to be applied on a line- by-line basis. The Swiss Formula is commonly referred to as a 'non-linear formula'. It is also called 'harmonising formula'. Another formula, the Girard formula, favoured by some larger developing countries including India and Brazil, is also non-linear but uses different variables, or coefficients, for developing and developed countries. Using a non-linear

formula to reduce tariffs in all NAMA sectors implies steep tariff cuts for products with high tariff levels and leveling of tariff structures that have tariff peaks and tariff escalation. Some developing countries have, however, argued that negotiations need not be based on the Swiss Formula. These countries assert that reference to a non-linear formula" falls within the 'initial elements', and that they have not been previously accepted or agreed upon.

2) Negotiations to be on bound rates: An important demand of developing countries was conceded when the Framework agreed that reductions will be based on bound rates, and not on applied rates.

3) Increased tariff binding: A key commitment that countries made in tariff negotiations is to set a ceiling on the level of a tariff, known as 'tariff binding'. This is because, under WTO rules, tariff reductions can be made only on tariffs that are bound. Many developing countries have only a small number of bound tariffs. A country can choose to apply tariffs at lower levels but, once a tariff is bound under the WTO, it cannot exceed that level. Many countries use lower applied tariffs than their bound levels. Annex B proposes that members who have less than 35 percent of their tariff lines bound are expected to bind all their tariffs at a specified level. LDCs are asked to increase their tariff bindings. In exchange for this, both groups will be exempt from applying the formula to reduce tariffs, whatever that turns out to be, during the Doha Round of negotiations.

Section II

Glossary

Ad Valorem Tariff: A tariff that has been calculated as a percentage of the value of an imported good.

Agreement on Subsidies and Countervailing Measures (ASCM Agreement): This is the Uruguay Round agreement that sets out the rules under which WTO members may provide and apply subsidies for domestic products or impose countervailing measures on subsidised imported products.

Agreement on Technical Barriers to Trade (TBT Agreement): This is the Uruguay Round agreement that sets the rules under which WTO members may establish and apply technical regulations and standards, including packaging, marking and labeling requirements. It also sets the procedures for assessment of whether domestic and imported goods comply with such technical regulations and standards

Anti-Dumping (AD) Measure: This is a governmental action that seeks to stop and remedy the dumping of imported goods into the territory of a WTO member by imposition of an anti-dumping duty.

Applied Tariffs: The current or the actual tariff rates levied on imported products. Applied tariffs may be below or equal to bound tariffs, but may not exceed them. For instance, the applied tariff in India for hydraulic brake fluids is 20 percent, while the bound tariff rate is 40 percent. This implies that India has the flexibility to increase this applied tariff rate to 40 percent.

Average Tariff: The simple average of all applied ad valorem tariffs (tariffs based on the value of the import) applicable to the bilateral imports of countries. This rate is calculated by adding up all the tariff rates and dividing them by the number of import categories.

Bindings: (see also bound rate) When a country commits not to raise the tariff on an item above a specified level, the level is called a 'binding'. The levels at which members bind their tariffs is agreed to through negotiations

in the WTO. Thus a binding (also called a concession) is a legal obligation not to raise tariffs on particular products above the specified rate agreed to in negotiations. This rate is incorporated into a country's schedule of concessions. WTO members can break a commitment (i.e. raise a tariff above the bound tariff), but only through negotiations with the countries affected by this measure, which may require payment of compensation for loss in trade by trading partners.

Bound Tariff: Refers to the specific level at which a tariff has been bound. By binding a tariff at a particular level, a country agrees not to raise the tariff above that level. In practice, the applied rates of countries (particularly developing countries) are usually lower than the bound rate. (See also binding.)

Compound Tariff: A combination of ad valorem and specific tariffs (such as 10 percent plus US$ 5 per kilogram).

Countervailing Measure (CVM): Also known as 'countervailing duty', this refers to a special duty or tax imposed by an importing country on an imported product for the purpose of offsetting any subsidies provided in the exporting country, directly or indirectly, for the making, production, or export of the product.

Doha Development Agenda: This is the name given by the WTO Secretariat to the trade negotiations that WTO members agreed to embark on when they met in Doha for the Fourth Ministerial Conference of the WTO in November 2001. It used the term 'development agenda' as opposed to 'round'. However, the term 'Doha Development Agenda' is not defined or even mentioned in the text of the Doha Declaration, so many members prefer the use of the term 'Doha work programme', which is technically correct.

Dumping: Dumping, as is generally understood in the WTO, occurs when a product is exported to other countries at a price that is lower than the domestic sale price (of a comparable or similar product), export price in a third country or lower than the cost of production.

Enabling Clause: The expression 'enabling clause' is used to describe the 'Decision on Differential and More Favourable Treatment, Reciprocity and Fuller Participation of Developing Countries' adopted in 1979 in the GATT. The aim of this clause was to allow developed countries to derogate (or deviate) from the requirements of MFN in order to stimulate trade with developing countries. It is the legal basis for the General System of Preferences (GSP) and special and differential treatment (S&DT or S&D).

G20: A group of countries that export agricultural products who came together as one of the strongest negotiating forces during the Fifth Ministerial Meeting of the WTO in Cancún. The G20, which is 'united around agricultural reform', is led by Brazil, China, India and South Africa. Other members include Argentina, Bolivia, Chile, Costa Rica, Cuba, Ecuador, Egypt, Guatemala, Indonesia, Mexico, Pakistan, the Philippines and Thailand. Together, these countries make up over half the world's population and two-thirds of its farmers.

Harmonised Commodity Description and Coding System (HS): The Harmonised Commodity Description and Coding System (HS) is a commodity classification system in which articles are grouped largely according to the nature of the materials of which they are made, as has been traditional in customs nomenclatures. The HS contains approximately 5000 headings and subheadings covering all articles in trade. These provisions are organised in 96 chapters arranged in 21 sections which, along with the interpretive rules and legal notes to the chapters and sections, form the legal text of the HS. The HS was developed and is maintained by the World Customs Organisation (WCO), an independent intergovernmental organisation with over 160 member countries based in Brussels, Belgium.

Generalised System of Preferences (GSP): A trading system allowed under the enabling clause, whereby developed countries offer preferential treatment, such as zero tariffs, to products originating in developing countries, without the requirement that the developing country reciprocate these measures. The countries granting this preferential treatment unilaterally choose what product ranges and which countries can benefit. However, they have also been criticised lately of using the GSP scheme to impose conditionality on developing countries.

Most Favoured Nation (MFN) Treatment: A commitment by a country to extend the same treatment it accords to its most-favoured trading partner to all its trading partners. For instance, if Canada imposes a one percent tariff on imports of kiwi fruit from New Zealand, MFN treatment would demand that Canada extend the same treatment to the import of kiwi fruit from all other WTO members. Together with national treatment (see below), MFN is at the core of the non-discrimination principle that lies at the heart of trade law.

Mixed Tariff: A choice between ad valorem and/or specific tariffs depending on the condition attached (for example, 10 percent or US$ 5 per kilogram, whichever is greater).

Rules of Origin: Laws, regulations and administrative procedures that determine a product's country of origin. A decision on origin by a customs authority

can determine whether a shipment falls within a quota limitation, qualifies for a tariff preference or is affected by an anti-dumping duty. These rules can vary from country to country.

National Treatment (NT): A commitment by a country to treat foreign products in the same manner as they would treat domestic products (provided that the foreign products are 'like' their domestic counterparts).

Non-Tariff Barriers (NTBs): These are measures that have trade-restrictive effects on trade in goods or services, but do not involve tariffs. These include technical barriers to trade and quantitative restrictions. They can include standards intended to promote health and protect the environment.

Safeguard Action: Emergency protection to safeguard domestic producers of a specific good from an unforeseen surge in imports (GATT Article XIX).

Schedule: A country's schedule is the document that sets out the terms, conditions and qualifications under which it will import foreign goods or open service sectors to foreign competition. Each WTO member has its schedule that sets out the areas in which it has made WTO commitments, for instance, the maximum tariff level (see binding or bound rate) for a particular product

Simple Average Applied Tariff Rate: The average of a country's applied tariff rates. The simple average applied tariff is calculated by dividing the total of applied tariffs by the number of tariff lines. For instance, if there are three tariff lines with an applied tariff rate of 10 percent, 25 percent and 33 percent respectively, then the simple average applied tariff rate will be {(10+25+33)/3} 22.67 percent.

Simple Average Bound Tariff rate: The average of a country's bound tariff rates on different tariff lines. The simple average bound tariff rate is calculated by dividing the total of bound tariff rates by the number of tariff lines. For instance, if there are three tariff lines with a bound tariff rate of 100.7 percent, 63.8 percent and 90 percent respectively, the simple average bound tariff rate will be {(100.7+63.8+90)/3} 84.33 percent.

Special and Differential Treatment (S&DT or S&D): Preferential treatment that WTO rules accord to developing countries, and which can be manifested in different ways: developing country exports may enjoy preferential access to developed country markets, may not be expected to offer full reciprocity in trade negotiations (i.e. they may gain more than they concede) and may enjoy greater flexibility and longer periods of time to phase in new commitments.

Subsidies: This refers to any direct or indirect payments made, or revenues foregone (e.g. tax exemptions or write-offs), by governments as a result of laws or measures requiring such actions in order to support the production, manufacture or trade of goods or services.

Specific Tariff: Tariff levied at a specific rate per physical unit of a particular item. For instance, a tariff of US$ 10 on every kilogram of butter imported.

Tariff: A duty or tax on goods imposed at the border or the tax imposed on the import or export of goods. In general parlance, however, it refers to 'import duties' charged at the time goods are imported. Tariffs have three primary functions: to serve as a source of revenue, to protect domestic industry and to remedy trade distortions. Tariffs can be ad valorem, specific or mixed.

Tariff Binding: This requires the setting of a maximum tariff rate on an imported product. While the applied tariff rate charged by an importing country can vary, an importing country cannot exceed the bound rate without renegotiating its WTO commitments. Tariff binding comprises two issues: tariff binding coverage, implying the number of tariff lines to be bound and the rate at which unbound tariff lines should be bound.

Tariff Classifications: National tariffs are organised in the form of tables that consist of tariff classification numbers' assigned to goods and a corresponding tariff rate. The way in which an item is classified for tariff purposes will have an important and palpable effect on the duties charged. When classifications are applied in an arbitrary fashion, they can in effect nullify rate reductions. The GATT does not have any rules regarding tariff classifications. In the past, countries had their own individual systems. However, as trade expanded, countries began to recognise the need for more uniform classifications, which resulted in the drafting of the HS in 1988. Today, most countries use a harmonised system of six-digit tariff numbers. The latest revision of the HS that is in force is the HS Revision of 2002 (HS 2002). The results of the NAMA negotiations will be finalised in HS 2002.

Tariff Escalation: Higher import duties on semi-processed products than on raw materials, and higher still on finished products. This practice protects domestic processing industries and discourages the development of processing activity in countries where raw materials originate.

Tariff Line: A single item in a country's tariff schedule.

Tariff Peaks: There is no universally accepted definition of tariff peaks. For developed countries, a tariff peak commonly refers to a tariff of more than 15

percent. Across all countries, a tariff peak is commonly understood as a tariff that is more than three times the country's average tariff. In other words, it refers to high tariffs, usually on 'sensitive' products, amidst generally low tariff levels.

Tariff Revenue: The revenue generated for the government from tariffs.

Tariff Schedule: It refers to, among other things, members' commitments to reducing bound rates. Also see schedule.

Tariff War: When one nation increases tariffs on goods imported from or exported to another country, and that country then retaliates by also raising tariffs.

Tariffication: Conversion of NTBs to tariffs at the level of their tariff equivalent. In the Uruguay Round, agricultural NTBs were tariffied and bound to replace unwieldy NTBs with tariffs that could then become the subject of negotiation.

Trade Creation: Occurs when liberalisation results in imports that displace less efficient local production and/or in expanding consumption that was previously depressed by artificially high prices due to protection.

Trade Diversion: Occurs when a trade reform measure discriminates between different trading partners and a less efficient (higher cost) source displaces a more efficient (lower cost) one. Can arise whenever some preferred suppliers are freed from barriers but others are not.

Uruguay Round: The multilateral round of trade negotiations that began in 1986 and concluded at the Marrakesh Ministerial meeting in April 1994. The Uruguay Round had many significant outcomes including the creation of the WTO.

Weighted Average Tariffs: A measure that weighs each tariff by the share of total imports in that import category. Thus, if a country has most of its imports in a category with very low tariffs, but has many import categories with high tariffs but virtually no imports, then the trade-weighted average tariff would indicate a low level of protection. The standard way of calculating this tariff rate is to divide total tariff revenue by the total value of imports. Since many countries regularly report this data, this is a common way to report average tariffs. To illustrate the difference between simple average tariff and weighted average tariff, Canada has a simple average tariff of 7.1 percent but its trade-weighted average, in contrast, is a mere 0.9 percent.

Swiss Formula: A tariff reduction formula that requires WTO members to narrow the gap between high and low tariffs ('harmonising tariffs'.) The Swiss Formula is a special harmonising method. Tariffs are reduced by using a harmonising coefficient that cuts higher tariffs more steeply in comparison to lower tariffs and establishes a maximum final rate no matter how high the original tariff was. Under the simple Swiss formula, the higher the tariff, the greater the cut. Developing countries are generally opposed to the simple Swiss formula, as they tend to have higher tariffs on industrial goods than developed countries. The Swiss formula is T1 = (B*T0)/(B+T0) where T1 is the new tariff rate, T0 is the initial tariff rate and B is the reduction coefficient.

Simple Swiss Formula: The proposals for the Simple Swiss formula include (1) the EC proposal of a single-coefficient Swiss formula with credits, (2) the Norway e proposal of a dual-coefficient Swiss formula with credits and (3) the US proposal for a dual-coefficient Swiss formula – one coefficient for developed countries and a higher coefficient for developing countries.

Girard Formula: Tariff reduction formula that takes into account the interests of developing countries by incorporating each country's average tariff. The equation for the formula is T1 = B*T2*T0/B*T2+T0, where T1 is the final bound rate, T2 is the average of the base rates, T0 is the base rate and B is the coefficient. Higher the value of B, lesser will be the rate of tariff reduction. For example, in the case of India, the bound tariff rate for fish and fish products is 100.7 percent. If the tariff reduction for this category takes place with a lower value of B, say 0.5, then the tariff rate after reduction will be 14.6 percent. If the value of B is changed to 1, the tariff rate after reduction will be 25.5 percent.

Sectoral Approach: Cutting or eliminating tariffs on certain sectors independent of the tariff-cutting formula that is followed for other sectors.

Zero-For-Zero Approach: Tariff reduction approach, which implies that in certain identified sectors all countries should bring down their tariff rates to zero. For instance, in the fish and fish products category, India and Pakistan have 87 percent and 90 percent of tariff lines unbound respectively. When such a high proportion of tariff lines is unbound in a sensitive sector, it would not be prudent for these countries to support the zero-for-zero approach.

EC Tariff Reduction Approach: The EC has proposed a Swiss formula at the NAMA negotiations in March 2005. The formula is T1 = (X*T0)/(T0+X), where T1 is the final tariff, X is the given coefficient and T0 is the initial tariff. Accord-

ing to this ambitious proposal unveiled by the EC, developing countries that accept this Swiss formula could use flexibilities such as exempting some tariff lines from tariff reduction. Further, if developing countries do not use the flexibilities they earn 'credits', which are used to increase the coefficient (X).

US Tariff Reduction Approach: The US has proposed a Swiss formula with two coefficients: one for developed countries and another for developing countries. The US proposal also states that the two coefficients must be 'within sight of each other', which means that the coefficient for developed countries should not be significantly greater than that for developing countries. In other words, this formula talks of harmonising the tariff rates of developed and developing countries. This approach will be detrimental to developing countries.

Norway Tariff Reduction Approach: Proposed by Norway, this is a non-linear tariff-cutting formula with two coefficients that includes a simple and transparent system of credits. The formula is T1 = (A*T0)/A+C), where T1 is the new bound tariff after the formula cut, T0 is the old bound tariff and A is the coefficient indicating the level of ambition. 'A' will have different values for developed and developing countries. 'C' is the credit that the country gets for binding 100 percent of its tariff lines and participating in the sectoral approach to tariff reduction.

Argentina, Brazil and India (ABI) Approach: ABI have proposed a modified Swiss formula for tariff reduction that takes into account the average tariff rate of every country. This formula is T1 = B*T2*T0/B*T2+T0, where T1 is the final bound rate, T2 is the average of the base rates, T0 is the base rate and B is the coefficient. The ABI approach is primarily based on the Girard formula. The main difference between the simple Swiss formula and the ABI formula is that while under the ABI proposal it is possible for developing countries to make lower percentage reduction than developed countries, with a scenario of all countries offering 50 percent reduction on an average with a coefficient of one, under the simple Swiss formula all countries will have to reduce their maximum tariff to a rate below the coefficient agreed to. Thus, in the Swiss formula the developing countries with high tariff averages will be making much greater percentage reduction in their tariffs than the developed countries, as they have very low tariffs on NAMA products. Additionally, the ABI proposal takes flexibilities for developing countries of not applying formula cuts or keeping a certain number of tariff lines unbound, contained in the July Framework Agreement (paragraph 8 of Annex B), as a non-negotiable given whereas the other proposals view them as trade-offs for higher reduction coefficients. India has clearly stated that the Swiss formula is not acceptable, as it does not meet the mandate.

Pakistani Tariff Reduction Proposal: Simple Swiss formula for tariff reduction proposed by Pakistan, with two coefficients. Based on existing bound average tariff rates, the coefficient for developed countries would be six and that for developing countries 30. This would have the effect of harmonising tariffs in both bands while retaining the difference in average tariff levels between the groups. According to Pakistan, its proposal would reduce the average bound rate of 35 percent and the applied rate of 25 percent of developing countries to around 15 percent, while the average bound and applied rates of developed countries would be cut roughly by four percent.

Non-Tariff Barriers: Government and non-government measures other than tariffs that restrict or distort international trade. Examples include import quotas and discriminatory government procurement practices. Baldwin (1970) defines 'non-tariff distortion' as 'any measure (public or private) that causes internationally-traded goods, services or resources devoted to the production of these goods and services to be allocated in such as way as to distort potential real world income'.

Non-Tariff Measures: Measures other than tariff measures that are used to regulate international trade are called non-tariff measures. These could be in the form of standards, certifications or custom formalities. When non-tariff measures discriminate between domestic sellers and non-domestic sellers, they are called non-tariff barriers.

Technical Barriers: These are various standards applied to imported products for health and safety reasons to ensure that imported products conform to the same standards as those required by law for domestically-produced products. Technical barriers may lead to prohibition of non-complying imports or necessitate cost-increasing production improvements.

Parallelism: A commonly used term in NTB negotiations under NAMA. It means that NTBs should be addressed in parallel to reduction in tariffs, as NTBs in many occasions have nullified existing market opportunities.