## WTO AND SUBSIDIES IN AGRICULTURAL SECTOR: INDIA'S POSITION

Dissertation submitted to Jawaharlal Nehru University in partial fulfillment of the requirements for the award of the Degree of

## **MASTER OF PHILOSOPHY**

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South Asian Studies Division Centre for South, Central, South East Asian, and South West Pacific Studies Jawaharlal Nehru University New Delhi – 110067 July 2004

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#### **<u>CERTIFICATE</u>**

Certified that the dissertation titled, "WTO AND SUBSIDIES IN AGRICULTURAL SECTOR: INDIA'S POSITION", submitted by C Prashanth in partial fulfillment of the requirements for the award of the degree of MASTER OF PHILOSOPHY, has not been previously submitted for any degree of this or any other university. This is his own work.

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We recommend that this dissertation may be placed before the examiners for evaluation.

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C Prashanth

#### CHAPTER 1

#### **INTRODUCTION**

The World Trade Organisation (WTO) came into effect on January 1, 1995 with the support of at least 85 founding members, including India.<sup>1</sup> The WTO is now the third economic foundation of worldwide proportions along with the International Monetary Fund (IMF) and the World Bank (IBRD). The WTO replaced the General Agreement on Tariffs and Trade (GATT) – which was one of the three institutions that took concrete form out of deliberations of the Bretton Woods conference, held in 1945.<sup>2</sup> The WTO was established by an agreement signed by 125 countries on April 15, 1994 at Marrakech (Morocco). As many as 77 of the 125 countries which signed the Uruguay Round Trade accord of the GATT became members of the WTO, including India.<sup>3</sup>

#### Functions of the WTO

The WTO has been created to facilitate the management of the Multilateral Trade Agreements and the fulfillment of the obligations under them. All Multilateral Trade Relations concerning the above Agreements are negotiated by the Ministerial Conference. The WTO also facilitates implementation of the results of the negotiations as decided by the Ministerial Conference and administers the understanding on Rules and Procedures Governing the Settlement of Disputes, forming part of the Agreements. The WTO is also responsible for the administration of the Trade Policy Review Mechanism that forms part of the Agreement. It is also the organ for establishing co-ordination with

<sup>&</sup>lt;sup>1</sup> Kumar Ratnesh, WTO: Structure, Functions, Tasks and Challenges (New Delhi: Deep and Deep Publications, 2001), p. 24. <sup>2</sup> ibid.

<sup>&</sup>lt;sup>3</sup> Haran Wardha, WTO and Third World Trade Challenges (New Delhi: Commonwealth Publishers, 2002), p. 78.

other wings of the United Nations such as the International Monetary Fund and the International Bank for Reconstruction and Development and its affiliated agencies.<sup>4</sup>

#### Structure of the WTO

The Ministerial Conference: The Ministerial Conference is the highest decision making body. It is composed of the representatives of the Members. The Ministerial Conference is the executive of the WTO and responsible for carrying out the functions of the WTO. The Ministerial conference has the authority to take decisions in any matters under the relevant MTA.

The General Council: The General Council is an executive forum composed of representatives of all the members. It discharges the functions of the Ministerial Conference.<sup>5</sup>

The GC establishes its own rules of procedures and also approves the rules of procedures for the functional Councils, namely-Council for Trade in Goods, Council for Trade in Services and Council for Trade related aspects of Intellectual Property Rights. established by it.

The Functional Councils under the GC include:

a) Council for Trade in Goods - oversees the functioning of the Multilateral Trade Agreements relating to Trade in Goods

b) Council for Trade in Services - oversees the functioning of the Multilateral Trade Agreements relating to Trade in Services<sup>6</sup>

<sup>6</sup> ibid. p. 7.

<sup>&</sup>lt;sup>4</sup> Ratnesh, n. 1, p. 24.

<sup>&</sup>lt;sup>5</sup> Sudhir Dawra, WTO: Organization, Functions and Activities (New Delhi: Radha Publications, 2001), p. -

c) Council for Trade-Related aspects of Intellectual Property Rights – oversees the functioning of the Multilateral Trade Agreements connected with Intellectual Property Rights and obligations, forming part of the Agreement<sup>7</sup>

Major Issues in the WTO

#### Agreement on Sanitary and Phytosanitary Measures

The agreement seeks to establish a multilateral framework of rules and discipline to guide the adoption, development and the enforcement of sanitary and phytosanitary measures in order to minimize their negative effects on trade.<sup>8</sup> Under this agreement members may adopt measures necessary to protect human, animal or plant life or health. There have been instances of developed countries trying to impose restrictions on imports from developing world, citing this agreement. The standards followed in the developing world takes time to catch up with the standards followed by the developed world. This agreement falls under Article 20 (b) of the GATT 1994.<sup>9</sup>

#### Agreement on Textiles and Clothing

The objective of the agreement is to integrate the regulation of international trade in textiles and clothing into the general WTO framework. Article 1 sets out provisions to be applied by members during the transition period for the integration of the textiles and clothing sector into the GATT 1994.<sup>10</sup> Under Article 2 members are required to notify the other members and the trade monitoring body (to be set up under Article 8) about all the quantitative restrictions within bilateral agreements between them as on date before the entry is brought into force of this agreement. Under Article 3, within 60 days of the entry

<sup>&</sup>lt;sup>7</sup> A K Vasisht and Alka Singh, WTO and New International Trade Regime: Implications for Indian Agriculture, (New Delhi: Agricultural Economic Research Association, 2003), p. 73.

<sup>&</sup>lt;sup>8</sup> M B Rao, WTO and International Trade (New Delhi: Vikas Publishing House Private Limited, 2001), p. 103. <sup>9</sup> ibid.

<sup>&</sup>lt;sup>10</sup> ibid., p. 105.

into force of the agreement, members maintaining restrictions on products shall (a) notify them in detail to Trade Monitoring Board, (b) provide to the TMB notifications with respect to them which have been submitted to any other WTO body.<sup>11</sup>

#### Agreement on Technical Barriers to Trade

The GATT 1994 agreement on technical barriers to trade recognizes the important contribution that international standards and conformity assessment systems make to improve efficiency of production and facilitating the conduct of international trade. It expresses its desire to encourage the development of such international standards and conformity assessment system, so that such systems do not create unnecessary obstacles to international trade. It also recognizes the contribution which international standardization makes in the transfer of technology from developed to developing countries. The agreement is applicable to all products including industrial and agricultural products.

#### Agreement on Trade Related Investment Measures

This agreement relates to trade restrictive distorting efforts of investment measures. It also refers to the need to promote the expansion and progressive liberalization of world trade and to facilitate investment across international frontiers so as to increase the economic growth of all trading partners. Agreement applies only to investment measures related to trade in goods (Article 1).<sup>12</sup> Article 2 deals with national treatment and quantitative restriction.

#### Agreement on Pre-shipment Inspection

The need for pre-shipment inspection of goods by a developing country arose because of over invoicing and under invoicing of goods of import and the rumored

<sup>&</sup>lt;sup>11</sup> ibid., p. 106.

<sup>&</sup>lt;sup>12</sup> K R Gupta (ed.), WTO Text, Volume1 (New Delhi: Atlantic Publishers and Distributors, 2000), p. 157.

payment of Kickbacks with respect of imports into a developing country. It also covers the need to check the quality of the goods for import and that verification of quality; quantity, price etc. are in accordance with the agreement to import goods in any given case.

#### Agreement on Agriculture (AoA)

The long-term objective of the AoA is to establish a fair and market oriented agricultural trading system. Reform process initiated through the negotiation of commitments on support and protection, will go a long way in strengthening and more operationally effective GATT rules and disciplines. Broadly there are four areas under the AoA, whereby member countries are required to adhere to commitments, and one other area under the Agreement on Trade related Aspects of Intellectual Property Rights.<sup>13</sup>

- i. Market access
- ii. Domestic support measures or the aggregate measure of support
- iii. Export competition or subsidies
- iv. Sanitary and Phytosanitary measures
- v. TRIPS

<sup>13</sup> ibid.

The point of contention at present is the level of domestic support extended to the farm sector. The WTO clause on domestic support has two main objectives: (a) to identify acceptable measures of support to farmers and (b) to discipline trade distorting support to farmers. There are two categories of support measures that are not subject to reduction under the agreement. These two categories of exempt support measures are: 1) Green Box Measures and 2) Blue Box Measures, while Amber Box Measures, are considered the most trade distorting and fall under reduction commitments. These measures are discussed in detail in Chapter 3.

#### Subsidies

Subsidies are prevalent in almost every aspect of the economy be it agriculture. industry, trade, transport, public health, education, etc. Subsidies can be defined as:

a) Long-run cost of products or services to government less prices at which these products or services made available to consumers or beneficiaries. That is difference between cost of production and selling prices. This difference arises due to pricing policy of the government, wherein government stipulates prices at which goods or services can be sold to consumer. The manufacturer, therefore, claims subsidy to overcome losses out of such pricing policy.

b) When public sector and private sector both are manufacturing identical items, government proposes the selling prices and it then affects the private sector in a situation in which equivalent services would have been provided by the private sector.<sup>14</sup>

Subsidies are also defined as:

a) A government practice involving a direct transfer of funds (e.g., grants, loans, and equity infusion), potential direct transfer of funds or liabilities

b) Government revenue that is otherwise due which is foregone or not collected

c) A government provides goods or services other than general infrastructure, or purchase goods

d) A government makes payments to a funding mechanism, or entrusts or directs a private body to carry out one or more of the type of functions mentioned in(a) to  $(c)^{15}$ 

<sup>&</sup>lt;sup>14</sup> Ratnakar Gedam, *Economic Reforms in India: Experience and Lessons* (New Delhi: Deep and Deep Publications, 1996), p. 220.

#### India's Socioeconomic Perspective

The overall socioeconomic situation at the time of Indian independence was poor. Widespread poverty, recurrent famines, low expectancy of life, high incidence of communicable and contagious diseases, low level of literacy, high dependence on Agriculture ,absence of industrial infrastructure and growing unemployment were some of the characteristics of the Indian economy. The partition of the country, was the cause of a crisis because, huge resources were spent on rehabilitation of the large population, which moved from across the border.<sup>16</sup> The situation called for urgent measures within the framework of a well-designed policy to initiate a process of growth, which could be self-sustaining over the years.

#### Economic Philosophy

The cornerstone of the economic philosophy is reflected in the choice of mixed economy both as a system and as a policy. As a system, mixed economy in India was deliberately chosen as a third way, which took the best from the existing systems and avoided their pitfalls, particularly those of the capitalist system represented by the USA and of the socialist system represented by the USSR.<sup>17</sup> Such a system was preferred to overcome the limitations of the exploitative and acquisitive economy of capitalism and the regimentation of the totalitarian state associated with the centrally planned socialist ideals and democratic institutions. As a policy, mixed economy entails regulation, control and surveillance of the economic system through the market mechanism itself. Given India's large agrarian structure, due emphasis is given to agriculture. Close to 70% of the Indian population is dependent on agriculture.

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<sup>&</sup>lt;sup>15</sup> WTO, *The Legal Text: The Results of the Uruguay Round of Multilateral Trade Negotiations*. (Cambridge: Cambridge University Press, 1999), p. 231.

<sup>&</sup>lt;sup>16</sup> ibid., p. 232.

<sup>&</sup>lt;sup>17</sup> A N Agrawal, Hari Om Varma, *India: Economic Information Year Book 1989* (New Delhi: National Publishers, 1989), p. 3. <sup>18</sup> ibid., p. 5.

Agriculture in India is a state subject according to entry 14 in List II (state list) of the Seventh schedule to the constitution of India. <sup>19</sup>At the start of the British rule, the Indian economy was by and large self-sufficient, possessing a good balance between agriculture and industry.<sup>20</sup> A large proportion of the population, about three-fourths. depended on agriculture which was a subsistence occupation. Agricultural activities were mainly devoted to food crops like paddy, wheat and millets. Most of the food produced in the village was consumed by the village population itself. The raw materials produced fed the handicrafts. The British pursued a trade policy that encouraged export of raw materials and import of manufactured goods. The farmers were forced, through zamindars and British agents, to switch over from food crops to cash crops and sell the latter for export to Britain.<sup>21</sup> This was one of the causes for the frequent occurrence of famines in the country. This system disturbed the agricultural cycle in India. The past legacy has a tootprint in certain aspects of Indian agriculture.

Indian agriculture in the present situation is known for its versatility in providing employment, livelihood, and food, nutritional and ecological security. Agriculture and allied activities contribute 29.1 percent to the GDP of India as compared to 2 percent in the US, France, Norway, and Japan, 5 percent in Korea.<sup>22</sup> Indian agriculture employs 69 percent of the total workforce compared to 2 percent in the US, UK and 2.6 percent in Germany.<sup>23</sup> This clearly shows the paramount importance of the agriculture sector for India.

The issue of domestic support to the agricultural sector in the form of subsidies has been a bone of contention in the WTO negotiating process. The agricultural sector is very crucial for a country like India. Over 65% of the population depend on this sector. Though industrialization and urbanization is growing, the importance of the agricultural

<sup>&</sup>lt;sup>19</sup> Vibha Mathur, Indian Economy and the WTO New Challenges and Strategies (New Delhi: New Century Publications, 2002), p. 122.

<sup>&</sup>lt;sup>20</sup> ibid.

<sup>&</sup>lt;sup>21</sup> ibid.

<sup>&</sup>lt;sup>22</sup> Rajesh Kumar Gupta, Agricultural Subsidies and Their Economic Implications (New Delhi: Deep and Deep Publications, 2002), p. 1.

sector cannot be underestimated. It is in this context that the viewpoint of India is very crucial in the WTO.

Subsidies in India are in existence from the very beginning of planning era. Throughout India's Five Years Plans, the cost of subsidies to the government has been on the rise. This is a clear indication that subsidies are not a new entrant to the Indian agricultural scene. The Dagli Committee on Control and Subsidies in India (1979), has aptly described subsidies as 'a powerful instrument in the armory of the government for exercising control over the functioning of the economy'<sup>24</sup>. Subsidies can be described as financial aid or financial transfers from the exchequer to certain pre-determined sections of the population or sections of the economy, with a view to improve the distribution of income or reduce the cost of production or price.<sup>25</sup>

The role played by subsidies in a developing country like India is quite crucial. India, predominantly being an agrarian economy, were advanced farm practices are not followed, necessitated the introduction of the domestic subsidy regime. The size of the population, dependent on agriculture is very high. Moreover, the percentage of marginal farmers is high, compared to farmers with large land holdings. Rural poverty is also a factor in the issuance of subsidies to the agriculture sector.

Since the launching of economic reforms in 1991, the word subsidies, in particular subsidies to agriculture have become highly contentious.<sup>26</sup> The impression created has been that Indian agriculture is highly subsidized through cheap fertilizers, free power and irrigation water in various states that the system can no longer carry on this burden.

A necessity was felt to rationalize the subsidies by increasing the price of fertilizers. But unfortunately this was met with stiff resistance, which ultimately led to rollback of the price hike. Price hikes were introduced and finally revoked, irrespective of

<sup>&</sup>lt;sup>23</sup> ibid., p. 2.

<sup>&</sup>lt;sup>24</sup> ibid., p. 4.

<sup>&</sup>lt;sup>25</sup> ibid.

the political dispensation in power. This aspect can be related to the government's approach in appeasing the primary sector. It is a known fact, that price of fertilizers has political ramifications. It is evident in policy circles that reforms in the agricultural sector, particularly subsidies is a pressing need to make the sector more healthy and competitive.

The rationales advocated behind the provision of subsidies are:

(i) To shift reallocation of subsidies along the desired lines.

(ii) Restraint in price in respect to essential and strategic items of consumption.

(iii) To raise the consumption level of the vulnerable sectors of the population.

(iv) To subsidize the use of a particular output, e.g., fertilizer in the production process.

(v) To develop backward regions.<sup>27</sup>

The role played by subsidies is multifarious.<sup>28</sup> The social justification of the subsidies lies in the facts that they should be equally distributed among the regions and groups of society for achieving the goal of rapid growth in agricultural development. During the last two decades agricultural subsidies in India have increased tremendously.

Provision of input subsidies in agriculture has been recommended on the ground that it encourages farmers to use new technology. It also gives incentives to use these subsidies and increase production. But the case advocated against subsidies is that it puts a heavy strain on the state exchequer.<sup>29</sup> In a developing country like India, which already has difficult fiscal situation, the provision of subsidies will lead to further strain in the system. Subsidies at times have been blamed for an unhealthy agricultural sector.

<sup>&</sup>lt;sup>26</sup> Ashok Gulati and Sudha Narayanan, *The Subsidy Syndrome in Indian Agriculture* (New Delhi, 2003), p. 1.

<sup>&</sup>lt;sup>27</sup> ibid.

<sup>&</sup>lt;sup>28</sup> Ratnesh, n. 1, p. 2.

<sup>&</sup>lt;sup>29</sup> A Vaidyanathan, "India's Agricultural Development Policy", *Economic and Political Weekly*, Vol. 35. No. 20, May 13, 2000, p. 1735.

Support to agriculture means different things to different people. As it takes many forms, and operates through many instruments. In a broad sense, support to agriculture comprises three segments, namely import policies, export policies and domestic policies. The WTO's approach to measuring domestic support is based on the concept of Aggregate Measure of Support (AMS).<sup>30</sup> The AMS has two components. product specific AMS and non-product specific AMS.<sup>31</sup> Product specific AMS is calculated for each basic agricultural product receiving market price support, non-exempt direct payments on any other subsidy that is not exempted from the reduction commitment under the Uruguay Round Agreement on Agriculture. Market price support represents the gap between a fixed external reference price and the domestic price. According to the URAA, the fixed external reference price would be based on year 1986-88.

Non-product specific AMS, the other component of AMS includes non-exempt direct payments that are not based on the domestic reference price differential and are estimated using budgetary outlays.<sup>32</sup> Non-product specific AMS consists of subsidies on inputs like fertilizers, electricity and irrigation.

#### **Fertilizers**

Fertilizer prices for both farmers and producers are controlled, so are the tertilizer imports. Producers are given a price called the retention price that is fixed on a plant by plant basis. The retention price is fixed on an ex-factory basis to ensure a 12 percent rate of return on net worth using normative costs based on capacity utilization of 80 percent.<sup>33</sup> The capacity utilization norm has been recently raised upward to 90 percent. A uniform

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<sup>33</sup> ibid.

<sup>&</sup>lt;sup>30</sup> Ramesh Chand, *Trade Liberalization, WTO and Indian Agriculture* (New Delhi: Mittal Publications, 2002), p. 88.

<sup>&</sup>lt;sup>31</sup> M M Ahmad and M A Khan, "WTO Challenges and opportunities-A case of Indian Agriculture", in D Panduranga Rao (ed.), *WTO and Competitiveness* (New Delhi: Excel Books, 2001), p. 288.

<sup>&</sup>lt;sup>32</sup> Arjun Singh, "GATT Negotiations on Domestic Support and Subsidies in Agreement on Agriculture: Implications and Impacts", in Y K Alagh (ed.), *Globalisation and Agricultural Crisis in India* (New Delhi: Deep and Deep Publications, 2003), p. 97.

price inclusive of freight is charged from farmers across the country for any given fertilizer.<sup>34</sup>

The difference between the amount paid to producers plus freight costs and costs of imports on the one hand and the receipts from the farmers on the other hand, is made up by the government and comprises the fertilizer subsidy expenditure by the government. However, since July 1991 potassic and phosphatic fertilizer prices have been decontrolled and up to now every year an ad hoc subsidy of Rs.1000 crore is being given to check the increase in the prices of these fertilizers.

#### **Electricity**

In general the farmers are charged for electricity a lump sum amount based on the capacity of the electric motor installed for irrigation pumps.<sup>35</sup> The question of subsidy to this sector has been highly contentious. This can be attributed to the fact that, in some states electricity is provided very cheap and in certain cases it is provided free. This leads to an inefficient power system. In states like Tamil Nadu and Punjab it is leading to problems.<sup>36</sup> State electricity boards have become poor performers. Dues to the electricity boards are mounting. When populist policies are followed, the long term effect of measures not properly assessed.

Political expediency has resulted in the announcement of a slew of measures to attract the attention of voters. The rural masses in particular are targeted. The economic implications of populist measures like free power are felt in the long run. It leads to heavy losses to the state electricity boards. In this manner the supply of power is also affected. It will lead to huge gap in the demand and supply of power. Resources are needed to generate sufficient power. But in the absence of adequate resources the supply of power gets affected. This leads to irregularities in power supply. This is the cause for

<sup>34</sup> ibid.

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<sup>&</sup>lt;sup>35</sup> K S Dhindsa and Anju Sharma, *Dynamics of Agricultural Development* (New Delhi: Concept Publishing Company, 2001), p. 291.

<sup>&</sup>lt;sup>36</sup> ibid., p. 293.

the inefficiency in the power system. Power subsidies have been blamed for this sorry state of affairs. The amount of electric energy consumed is not metered. The lump sum charges are quite low compared to the electricity charges of other categories.<sup>37</sup>

#### **Irrigation**

Irrigation water supplied from public irrigation systems does not recover the full cost of water. It is quite difficult to estimate the value of this subsidy. Many irrigation systems are multipurpose systems and the cost of water for irrigation cannot be calculated easily. The method commonly employed for measuring irrigation subsidies is based on the concept that the irrigation subsidy can be approximated as the losses that the input supplying agency incurs on account of supplying irrigation water at concessional rates.<sup>38</sup> Broadly, irrigation subsidy, like power subsidy, can be viewed from three different dimensions. From the farmers point of view as uses of water, from the perspective of irrigation authority supplying irrigation water and thirdly from that of society at large.

The formulation of irrigation subsidy adopted is based on the difference in the cost of supplying irrigation water and what the farmers pay for irrigation water as its direct price. Irrigation subsidies represent the perspective of the supplying agency. The focus is on estimating the cost of the public irrigation water through major and medium irrigation schemes, as also minor irrigation schemes and the payments made by farmers for irrigation water. The cost of irrigation water through major and medium schemes comprises three components. a) capital cost, b) working cost of operation and maintenance, c) depreciation. Irrigation subsidy over the years has become a thorny issue. In states like Punjab and Haryana, there have been reports of too much of water being drawn for irrigation purposes. Too much of irrigation leads to scarcity in the long run as the usage of water is also not efficient or economical in India.<sup>39</sup>

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<sup>&</sup>lt;sup>37</sup> ibid.

<sup>&</sup>lt;sup>38</sup> Chand, n. 30, p. 144.

<sup>&</sup>lt;sup>39</sup> ibid.

These are the major input subsidies provided in India. The other input subsidies are subsidy on gypsum, subsidy on gobar gas plant and subsidy on oil seeds, and subsidy on pesticides and insecticides.

The basic issues that arise with respect to agricultural subsidies are:

(i) The growth and distribution of agricultural subsidies in different states.

(ii) The financial burden of agricultural subsidies on the state exchequer.

(iii) To study the impact of agricultural subsidies on agricultural subsidies on agricultural production, cropping pattern and cropping intensity.

Subsidies directed for or related to the agriculture sector have been designed to compensate for the high cost of production. Subsidies given on agricultural inputs are assumed to be more beneficial than price support especially for the small and marginal farmers, because the input price increase is immediately compensated whereas support prices are likely to benefit large farmers. In general it can be said that in an agrarian country like India, the importance of subsidies cannot be underestimated. India and other developing countries are not alone in providing subsidies. Developed countries particularly, the US and EU run huge farm budgets, which run into billions of dollars, which have been blamed for distorting world farm trade.<sup>40</sup>

The issue of subsidies or support to agriculture first came under international limelight with the Uruguay Round of multilateral trade negotiations in the late 1980s.<sup>41</sup> During this period, protectionist measures, in the form of subsidies to agricultural sector was high, leading to severe distortions in international trade in agriculture. The question of subsidies is not confined to India alone. Developed countries like USA and European Union, dole huge amount of subsidies. Issue of subsidies can be related to the problem of food security, which arose after World War II.<sup>42</sup> Many economies of Europe were in shambles in the aftermath of the War. Financial resources were diverted towards the war

<sup>&</sup>lt;sup>40</sup> R Thamarajakshi, "Doha Declaration and Agriculture in Developing Countries", *Economic and Political Weekly*, Vol. 37, No. 1, January 5, 2002, p. 23.

<sup>&</sup>lt;sup>41</sup> Anwarul Hoda, "WTO Agreement on Agriculture and India", in Anwarul Hoda (ed.), WTO and Indian Agriculture, (Delhi, 2002), p. 21.

machine. This leads to a situation, wherein other sectors were affected. Agricultural farmlands were plundered during the war. The most important issue that attracts major attention is the retention of agricultural population in the farmlands.

With the onset of industrialization in Europe and USA there was a major shift in people and goods towards urban areas. Due to increased opportunities in urban areas in the form of jobs, people started migrating in large numbers to cities. A vacuum was created in rural areas. Food being the basic necessity to survive was found short of supply. Governments in Europe and USA started giving incentives in large quantities to farmers to retain them in the farms.<sup>43</sup> Incentives to the farmers were so huge that the farmers started to get good returns on their produce. Support measures like buying produce at rates higher than the prevailing world prices, ensured that farmers got a good price for their produce.

This in contrast to the situation prevailing in developing countries like India. In India, output prices are kept low, to make food grains affordable for the growing urban population. Measures like lowering output prices, has counterbalancing effect when it comes to input prices. Input prices are lowered so that farmers get affordable inputs. It has been observed that developed nations have been inefficiently using their agricultural resources; developing countries have been following unproductive farmer policies.<sup>44</sup> There is an equal measure of criticism on both the fronts. Both policies in the long run will have negative consequences.

Much of the recent agricultural policy particularly in the developed countries has indeed been guided by the need to meet the reduction commitments made by each of them in the URAA. With increased globalization and the onset of WTO, it is imperative on the part of developed countries to reform their respective agriculture sectors. In the

<sup>&</sup>lt;sup>42</sup> ibid., p. 24.

<sup>&</sup>lt;sup>43</sup> Sanjoy Bagchi, "Seattle to Qatar: World Trade Negotiations", *Economic and Political Weekly*. Vol.36, No.43, October 27, 2001, p. 4046.

<sup>&</sup>lt;sup>44</sup> Heinrich Wohlmeyer and Theodor Quendler, *The WTO, Agriculture and Sustainable Development* (Sheffield: Greenleaf Publishing, 2002), p. 339.

present day participative world order, exclusive groupings, on the lines of developed, developing and underdeveloped world, are difficult to organize.

The wings of globalization, which are spreading fast. cannot escape this aspect. In the course of reform of domestic agricultural support policies, most developed countries have increasingly moved away from market price support in favour of other support forms such as direct payments. This is primarily because the wide range of support measures that are exempt from reduction commitments under

The Green and Blue Boxes of the AMS in the Uruguay Round offers enormous possibilities for member countries to alter their domestic support structure. The EU and Norway in particular have relied primarily on the Blue Box so that most of their measures with reduction commitments have been transformed into Blue Box instruments like partially decoupled direct payments. In contrast, Australia and New Zealand, have long since completed reforms support agriculture in perhaps the most transparent and non-trade distortionary manner. Unlike the EU, the United States has converted most of their Amber instruments into Green instruments that are direct payments for income support but delinked from prices. In Japan and South Korea, reform has only begun recently.<sup>45</sup>

The term subsidy as used in the final act embodying the new trade agreement is not the same as it is conventionally used. For the purpose of world trade, it is reck oned as aggregate measure of support. The AMS consists of two components, namely, product specific support and Non-product specific support.<sup>46</sup> The product specific support is estimated as the difference between the domestic price of the relevant agricultural product and a fixed external reference price multiplied by the quantity of output eligible to receive the domestic support. The Non-product specific support is given in the form of input subsidies for fertilizers, electricity, irrigation, seeds and credit.

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<sup>&</sup>lt;sup>45</sup> ibid.

<sup>&</sup>lt;sup>46</sup> ibid., p. 342.

For the purpose of calculating the domestic support to farmers, both the product specific support and Non-product specific support components of AMS are taken into account. In the case of developing countries like India, the obligation to reduce domestic support arises if the total AMS exceeds 10%. In other words, the AMS to agricultural sector should be less than or equal to 10% of the agricultural GDP. A number of measures maintained in India for agricultural support get the benefit of exemption from reduction commitments because they qualify as Green Box measures.

India's grant for subsidies is well within the permissible limit. India's provision of support in the form of product specific nature includes market price support.<sup>47</sup> That has been existent in India for the past many decades. Given India's heavy dependence on agriculture, the market price support programme is still continuing which ensures that farmers get a reasonable price for their produce. This can be attributed to the unpredictable nature of agriculture. Factors like climate play a crucial role in determining agricultural production.

India's position regarding subsidies has been in tune with the emerging situation. In India, the fiscal pressure that input subsidies currently entail, even when they cross 2% of the GDP, is tremendous.<sup>48</sup> Given that India's resources cannot match that of the developed countries, it may be useful for India to press these countries to scale down their support, rather than compete with them in giving more support to agriculture.

Providing subsidies on inputs in India has had and continues to have, several undesirable consequences. During the expansionary phase of production and use of critical inputs, the basic principles of pricing and management of these inputs have been regulated to the background. This neglect has brought with it several problems. Most input-supplying agencies like the state electricity boards and the irrigation departments have been unable to sustain themselves financially with many on the verge of bankruptcy.

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<sup>&</sup>lt;sup>47</sup>M G Basavaraja, WTO: Regional Trading Arrangements and India (New Delhi: Serial Publications, 2003), p. 106.

There has been considerable debate as to whether the subsidies on inputs like power, fertilizer and water do actually reach those they are intended for. Under the circumstances, therefore, the importance of input subsidy reform cannot be underestimated. Subsidies on inputs in India are huge. Moreover, the magnitude of these subsidies is growing and given the trend, there will soon come a time when the subsidy regime collapses under its own weight.

<sup>48</sup> ibid.

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#### CHAPTER 2

#### INDIA AND WTO: DOMESTIC AGRICULTURAL SUBSIDIES

Agriculture is the mainstay of the Indian economy. Agriculture and allied activities make the single largest contribution to the GDP, accounting for almost 27% of the total.<sup>1</sup> Agriculture provides employment to around 65% of the total work force.<sup>2</sup> The share of agricultural products in the total export earnings is also significant. Many industries still depend on the agricultural sector for raw materials as well as for a market. Agricultural growth is an important factor in containing inflation, raising agricultural wages and for employment generation.

India inherited a stagnant agriculture at the time of independence in 1947.<sup>3</sup> The first task of the Indian government in the immediate post-independence period was. therefore, to initiate growth in agriculture. A planning framework governed the agricultural policy. The quantum of Plan outlay, its financing and the targets set for the agricultural sector were all decided through the planning process at the state and central levels. The first three Five-Year Plans concentrated on growth with some institutional changes including abolition of intermediaries in agriculture like zamindars and jagirdars.<sup>4</sup> The agricultural growth rate of around 2.7% per annum in the post-independence period is much higher than the negligible growth rate of 0.3% per annum in the first half of this century.<sup>5</sup> The production of food grains increased from 50.8 million tonnes in 1950-51 to about 199.3 million tonnes in 1996-97. This shows the sustained growth in the agriculture sector.<sup>6</sup>

<sup>&</sup>lt;sup>1</sup> Government of India, Eighth Five Year Plan (New Delhi: Planning Commission, 1992), p. 434.

<sup>&</sup>lt;sup>2</sup> ibid., p. 436.

<sup>&</sup>lt;sup>3</sup> Vibha Mathur, *Indian Economy and the WTO: New Challenges and Strategies* (New Delhi: New Century Publications, 2002), p. 118.

<sup>&</sup>lt;sup>4</sup> ibid., p. 120.

<sup>&</sup>lt;sup>5</sup> ibid.

| Table 2.1 |  |
|-----------|--|
|-----------|--|

|                        | Target | Actual |
|------------------------|--------|--------|
| First Plan (1951-56)   | 2.1    | 3.61   |
| Second Plan (1956-61)  | 4.5    | 4.27   |
| Third Plan (1961-66)   | 5.6    | 2.84   |
| Fourth Plan (1969-74)  | 5.7    | 3.30   |
| Fifth Plan (1974-79)   | 4.4    | 4.80   |
| Sixth Plan(1980-85)    | 5.2    | 5.66   |
| Seventh Plan (1985-90) | 5.0    | 6.01   |
| Eight Plan (1992-97)   | 5.6    | 6.78   |

### Growth Performance in the Five Year Plans (per cent per annum)<sup>7</sup>

Source: Government of India, Ninth Five Year Plan

#### Table 2.2

## GDP, Agriculture and Foodgrains Growth Rates<sup>8</sup>

| Year      | GDP* | GDP Agri and   | (per cent) |
|-----------|------|----------------|------------|
|           |      | Allied Sectors | Foodgrains |
|           |      |                | Production |
| 1992-93   | 5.1  | 5.8            | 6.6        |
| 1993-94   | 5.9  | 4.1            | 2.7        |
| 1994-95   | 7.3  | 5.0            | 3.9        |
| 1995-96   | 7.3  | -0.9           | -5.8       |
| 1996-97   | 7.8  | 9.6            | 10.5       |
| 1997-98   | 4.8  | -2.4           | -3.6       |
| 1998-99   | 6.5  | 6.2            | 5.9        |
| 1999-2000 | 6.1  | 1.3            | 3.0        |

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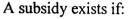
<sup>&</sup>lt;sup>6</sup> Government of India, n. 1, p. 435.
<sup>7</sup> Government of India, *Ninth Five Year Plan* (New Delhi: Planning Commission, 1997), p. 50.
<sup>8</sup> Government of India, *Economic Survey 2001-2002*, p. 186.

| 2000-2001 | 4.0 | -0.2 | -6.6 |
|-----------|-----|------|------|
| 2002-2002 | 5.4 | 5.7  | 6.8  |

Source: Government of India, *Economic Survey 2001-2002* Note: \**At 1993-1994 prices* \*\**Advance Estimates* 

The economy in India continues to be highly agriculture-centric even at the present juncture. The GDP contribution by the agriculture sector is so crucial, that it is the backbone of the Indian economy.

Subsidies, which have become a major issue, are at the centre of any discussion on reforming the agriculture sector. In the ongoing discussions in the WTO, this issue has assumed centre stage. It focuses the issue on India, because, India provides input subsidies to its agriculture sector. There has been a call from various quarters for the reform of the subsidy regime.



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(a) There is a financial contribution by a government or any public body.

(b) A government practice involving a direct transfer of funds, potential direct transfer of funds.

(c) A government provision of goods and services other than general infrastructure, or purchase of goods.

(d) Government revenue that is otherwise due is foregone or not collected.

(e) A government makes payments to a funding mechanism, or entrusts or directs a private body to carry out one or more of the type of function illustrated in (a) and (b).<sup>9</sup>

The other definition of subsidy is:

(i) Long-run cost of products or services to government less prices at which these products or services made available to consumers or beneficiaries, that is. difference

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between cost of production and selling prices. This difference arises due to pricing policy of the government, wherein government stipulates prices at which goods or services can be sold to consumer. The manufacturer, therefore, claims upon subsidy to overcome losses out of such pricing policy. It is assumed that manufacturing cost is higher than the selling price.

(ii) When public sector and private sector both are manufacturing identical items. government proposes the selling prices and it then affects the private sector in a situation in which equivalent services would have been provided by the private sector. This comprises of pricing subsidy plus difference in cost between private and public provision of the service.<sup>10</sup>

Subsidies are similar to indirect taxes in that they open a gap between the cost of production and distribution, and the price paid by the subsidized buyer.<sup>11</sup> Subsidies distort the pattern of consumption. As revealed in the study on subsidies con ducted by the National Institute of Public Finance and Policy, the indirect cost of subsidies is much greater than the direct budgeted subsidies<sup>12</sup>. Thus, there is a need to reduce subsidies, target remaining subsidies on the poor and search for more effective mechanisms for protecting the poor.

The retention price system in fertilizers is one of the most ineffective. Studies have shown that depending on world prices, anything between 50% to 75% of the fertilizer subsidy goes to the producers.<sup>13</sup> Several committees, such as the Hanumantha Rao Committee and the Alagh Committee, have recommended its abolition.<sup>14</sup> The sooner this is done, the quicker will normal market incentives for improvement in productivity of investment and energy efficiency come into operation. To minimize the effect on farmers.

<sup>12</sup> ibid., p. 27.

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<sup>&</sup>lt;sup>9</sup> WTO, *The Legal Text: The Results of the Uruguay Round of Multilateral Trade Negotiations* (Cambridge: Cambridge University Press, 1999), p. 231.

<sup>&</sup>lt;sup>10</sup> Ratnakar Gedam, *Economic Reforms in India: Experience and Lessons* (New Delhi: Deep and Deep Publications, 1996), p. 220.

<sup>&</sup>lt;sup>11</sup>Government of India, *Economic Survey 2000-2001* (New Delhi: Ministry of Finance, 2000), p. 26.

<sup>&</sup>lt;sup>13</sup> ibid., p. 28. <sup>14</sup> ibid., p. 29.

the prices of fertilizer and natural gas should move towards parity with international prices, through appropriate customs and excise duties.

Table 2.3

| Five Year   | 1 <sup>st</sup> | 2 <sup>nd</sup> | 3 <sup>rd</sup> | 4 <sup>th</sup> | 5 <sup>th</sup> | 6 <sup>th</sup> | 7 <sup>th</sup> | Annual |
|-------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|--------|
| Plans       | 1951-           | 1956-           | 1961-           | 1969-74         | 1974-           | 1               | 1               | 1990-  |
|             | 56              | 61              | 66              |                 | 79              | 980-85          | 985-90          | 91     |
| Agriculture | 238             | 275             | 591             | 2059            | 3356            | 6440            | 10524           | 3803   |
| All sectors | 2377            | 4800            | 8099            | 15902           | 39322           | 97500           | 180000          | 64717  |

Source: Government of India, Eighth Five Year Plan, 1992-1997.

India is a founder member of GATT, the WTO's predecessor.<sup>15</sup> India's international exposure cannot be underestimated. As a member of WTO, India is sensible, to the developments in WTO, and its impact on world trade. India's concern has been for the developing and underdeveloped countries, and at the same time, it has been paying keen adherence to various international agreements. The Agreement on Agriculture (AoA) component of WTO has enormous implications for India, which are discussed in the following chapter

Subsidies in India have been in existence from the very beginning of the planning era. Through all of India's Five-Year Plans, the cost of subsidies to the government has been on the rise. This is a clear indication that subsidies are not a new entrant to the Indian agricultural scene. The Dagli Committee on Control and Subsidies in India (1997) has aptly described subsidies as a powerful instrument in the armoury of the government for exercising control over the functioning of the economy.<sup>16</sup> Subsidies can be described as financial aid or financial transfer from the exchequer to certain pre-determined sections of the population or sections of the economy, with a view to improving the

<sup>&</sup>lt;sup>15</sup> Haran Wardha, WTO and Third World Trade Challenges (New Delhi: Commonwealth Publishers, 2002), p. 76.

<sup>&</sup>lt;sup>16</sup> Rajesh Kumar Gupta, Agricultural subsidies and The Economic Implications (New Delhi: Deep and Deep Publications, 2002), p. 1.

distribution of income or reduce the cost of production or price.<sup>17</sup> The role played by subsidies in a developing country like India is therefore, quite crucial. Since not very advanced farm practices are followed in this country, the introduction of the domestic subsidy regime has been necessitated. Besides the size of the population dependent on agriculture being very high, the percentage of marginal farmers is high, compared to farmers with large land holdings. Rural poverty is another factor in the issuance of subsidies to the agriculture sector.

During the 1990s, of the issues being debated about Indian agriculture, subsidies were the major issue that came to limelight. Since the launching of economic reforms in 1991, the subsidies, in particular subsidies to agriculture have become highly contentious.<sup>18</sup> The impression created has been that Indian agriculture is highly subsidized through cheap fertilizers, free power and irrigation water in various states and that the system can no longer carry on this burden.

A necessity was felt to rationalize the subsidies by increasing the price of fertilizers. But this was met with stiff resistance, which ultimately led to rollback of the price hike. Price hikes were introduced and finally revoked, irrespective of the political dispensation in power. This aspect can be related to the government's approach in appeasing the primary sector. It is a known fact, that price of fertilizers has political ramifications. It is evident in policy circles that reforms in the agricultural sector, particularly subsidies are a pressing need to make the sector more healthy and competitive.

The role played by subsidies is multifarious. The social justification of the subsidies lies in the fact that they should be equally distributed among the regions and groups of society for achieving the goal of rapid growth in agricultural development. Agricultural subsidies in India have thus increased tremendously, over the decades.

<sup>17</sup> ibid.

Provision of input subsidies in agriculture has been recommended on the ground . that it encourages farmers to use new technology.<sup>19</sup> It also gives incentives to use these subsidies and increase production. But the case advocated against subsidies is that it puts a heavy strain on the state exchequer. In a developing country like India, which already has a difficult fiscal situation, the provision of subsidies will lead to further strain in the system. Subsidies at times have been blamed for an unhealthy agricultural sector.

Support to agriculture means different things to different people. As it takes many forms, and operates through many instruments. In a broad sense, support to agriculture comprises three segments, namely, import, export and domestic policies. The WTO's approach to measuring domestic support is based on the concept of Aggregate measure of support.<sup>20</sup> The Aggregate Measure of Support (AMS) has two components, Product specific AMS and Non-product specific AMS. Product specific AMS is calculated for each basic agricultural product receiving market price support, and exempt direct payments on any other subsidy that is not exempt from the reduction commitment under the Uruguay Round agreement on agriculture.<sup>21</sup> Market price support represents the gap between a fixed external reference price and the domestic price. The price gap may arise due to a wide range of measures including border measures. According to the Uruguay Round AoA, the fixed external reference price would be based on year 1986-88.

Non-product specific AMS, the other component of AMS, includes non-exempt direct payments that are not based on the domestic reference price differential and are estimates using budgetary outlays. Non-product specific AMS consists of subsidies on inputs like fertilizers, electricity and irrigation.

<sup>&</sup>lt;sup>18</sup> K S Dhindsa and Anju Sharma, *Dynamics of Agricultural Development* (New Delhi: Concept Publishing Company, 2001), p. 279.

<sup>&</sup>lt;sup>19</sup> R K Sinha, "Freeing the Agriculture", in R K Sinha (ed.), *India's Economic Reforms and Beyond* (New Delhi: Anamika Publishers, 1995), p. 135.

<sup>&</sup>lt;sup>20</sup> Sompal, "WTO and Indian Agriculture," in Anwarul Hoda (ed.), *WTO and Indian Agriculture* (New Delhi: Social Science Press, 2002), p. 5. <sup>21</sup> ibid.

Fertilizers, electricity and irrigation, are the major components on which Nonproduct specific support is extended.<sup>22</sup> Subsidies on fertilizers are supposed to be the highest in magnitude at over Rs132 billion and amounting to 0.75 percent of the GDP in 1999-2000.<sup>23</sup> This is one of the crucial areas were reforms, are needed. Fertilizer prices for both farmers and producers are controlled, so are fertilizer imports. Producers are given a price called the retention price that is fixed on a plant-by-plant basis. The retention price is fixed on an ex-factory basis to ensure a 12% rate of return on net worth using normative costs based on capacity utilization of 80%.<sup>24</sup> The capacity utilization norm has been recently raised upward to 90%.

A uniform price, inclusive of freight, is charged from farmers across the country for any given fertilizer. The difference between the amount paid to producers plus freight costs and costs of imports on the one hand and the receipts from farmers on the other hand, is made up by the government and comprises the fertilizer subsidy expenditure of the government. However, since July 1991 potassic and phosphatic fertilizer prices have been decontrolled and up to now every year an ad hoc subsidy of Rs.1000 crore is being given to check the increase in the prices of these fertilizers.<sup>25</sup>

The economic reforms initiated in 1991 mark the first major attempt at fertilizer price reform in India and set the stage for any discussion on pricing policy for fertilizers in India. The three main constituents of the fertilizer industry are urea, di-ammonium phosphate and muriate of potash. Of the three, only urea is currently under the retention price system (RPS). The government fixes retention prices for urea output for each plant. The RPS is essentially a cost-plus approach, with some norms regarding capacity utilization. The plant specific RP are revised every quarter so that price increases in plant inputs can be taken into account. The retail price of urea too is fixed and is uniform throughout the country. The difference between the RP and what the farmer pays, when

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<sup>&</sup>lt;sup>22</sup> ibid., p. 7.

<sup>&</sup>lt;sup>23</sup> Ashok Gulati and Sudha Narayanan, *The Subsidy Syndrome in Indian Agriculture* (New Delhi: Oxford University Press, 2003), p. 51.

<sup>&</sup>lt;sup>24</sup> ibid.

<sup>&</sup>lt;sup>25</sup> S S Acharya and D P\_Chaudhri, *Indian Agricultural Policy at the Crossroads* (Jaipur: Rawat Publications, 2001), p. 160.

the former exceeds the later, is paid out to the manufacturers of urea. There is, in addition, a freight subsidy for moving fertilizers from the factory to their destination under the freight equalization scheme.

In the Budget of 2000-01, the selling price of DAP was increased by 7% to Rs.8900 and that of MOP by 15% to Rs.4255 with the aim of reducing the subsidy bill. Prices of urea to the farmers too were increased by 15% to Rs.4600 per tonne.<sup>26</sup> In addition, a provisional flat rate concession of Rs 3900 per tonne on indigenous DAP and Rs.1050 per tonne on imported DAP were fixed. More recently, the final rates fixed for indigenous and imported DAP were Rs.4100 and Rs.2550 per tonne. The rate of MOP during this time was Rs.3200 per tonne.<sup>27</sup>

The huge fertilizer subsidy bill that India incurs today should definitely put the finance ministry on notice. The fertilizer subsidy in the central government budget has increased to almost Rs.132.5 billion in 1999-2000 representing a ten-fold increase. As a percentage of GDP, this represents an increase from 0.26 in 1981-82 to a peak of 1.11% in1989-90.<sup>28</sup> It soon declined so that just before reforms began, subsidies amounted to 0.92 % of GDP. As measures were taken in the ensuing years to cut down fertilizer subsidy, this ratio started coming down. But in 1997-98 and 1998-99, the fertilizer subsidy bill shot up in response to correction in the concession prices of feedstock like naphtha and furnace oil/low sulphur heavy stock, and has since stabilized in the range of 0.6-0.8% of GDP.

The debate continues in official and academic circles, concerning the real beneficiaries of fertilizer subsidy. Are farmers who are supposed to be the real beneficiaries, really benefiting out of the fertilizer subsidy? One way of looking at this issue is to focus on the imports. It involves estimating the price the farmer would have to pay for imported fertilizer. The free trade price is approximated by the farm-gate cost of imported fertilizers, that is price plus all the handling expenses (marketing and

<sup>26</sup> ibid.

<sup>27</sup> ibid.

transporting) from the ship to the market from where the farmer buys fertilizers. The subsidy estimates in the budget are largely influenced by the domestic costs of producing fertilizer vis-à-vis what actually farmers pay.

Overall, for the entire period of 1981-82 to 2000-01, the share of farmers in central government fertilizer subsidy was 67.50% and industry's share, 32.50% with marginal to medium fluctuations. It is during the 1990s, when the import parity prices started rising, that the share of farmers rose to 78.58%. During the 1980s, the fertilizer industry was being highly subsidized – to the tune of almost three fifths of the government budget of fertilizer subsidy – but during the 1990s it was subsidized to a lesser extent. However, in the late 1990s, with a significant drop in import parity prices, notably of urea, the situation is now similar to that in the 1980s, so that in 1999-2000 and 2000-01, the fertilizer industry's share in the subsidies is substantial.<sup>29</sup>

The next important area where subsidies are given is in the power sector. In general, the farmers are charged for electricity, a lump sum amount based on the capacity of the electric motor installed for irrigation pumps.<sup>30</sup> The question of subsidy to this sector has been highly contentious. This can be attributed to the fact that, in some states electricity is provided very cheap and in certain cases it is provided free. This leads to an inefficient power system. In states, like Tamil Nadu and Punjab this has caused problems. State electricity boards have become poor performers and dues to the electricity boards are mounting. When populist policies are followed, the long-term effect of measures is not properly assessed.

Politicians in order to please the masses announce a slew of measures to attract the attention of voters. The rural masses in particular are targeted. The economic implications of populist measures like free power are felt only in the long run. It leads to heavy losses to the state electricity boards and the supply of power is also affected.

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<sup>&</sup>lt;sup>28</sup> ibid., p. 161.

<sup>&</sup>lt;sup>29</sup> V S Vyas, India's Agrarian Structure: Economic Policies and Sustainable Development (New Delhi: Academic Foundation, 2003), p. 45.

<sup>&</sup>lt;sup>30</sup> Government of India, n.1, p. 4.

Resources are needed to generate sufficient power. But in the absence of adequate resources, the supply of power gets affected. This leads to irregularities in power supply. This is the cause for the inefficiency in the power system. Power subsidies have been blamed for this sorry state of affairs. The amount of electric energy consumed is not metered and lump sum charges are quiet low compared to the electricity charges of other categories.

The power sector in India is constitutionally (under article 246) a joint responsibility of the state and the central government as it is a concurrent subject.<sup>31</sup> It was planned that while the centre would take charge of overall development of the power sector, the states would be responsible for power generation and distribution. Thus, in all the states, state electricity boards have been constituted as autonomous organizations, which are fully integrated and entrusted with the responsibility of planning, generation of power and its distribution to all the consumers.<sup>32</sup> Their counterparts in smaller states and union territories are the Electricity Departments. Although the central government does participate and support the states in certain areas, the performance of the Indian power sector depends largely on the working of the SEBs.

The pricing policy has, so far, been basically the responsibility of the SEBs. The method followed by most of the SEBs in India for pricing power supply is the traditional cost-plus method.<sup>33</sup> However, none of the SEBs has evolved a method to account for costs of electricity to agriculture separately. Even at the aggregate level, the costs that the SEBs considers are average costs, whereas economists suggest linking the power tariff to long run marginal cost. Moreover, even in the use of average costs there is no rational basis for allocation of costs to various consumers. For example, power supply along low-tension lines works out to be the most expensive. In contrast, the cost of electricity-supply at high- tension and extra high-tension are much lower. LT consumers are usually charged tariff rates far below the levels charged from HT users.

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<sup>&</sup>lt;sup>31</sup> Mathur, n. 3, p. 92.

<sup>&</sup>lt;sup>32</sup> Y K Alagh, *Globalisation and Agricultural Crisis in India* (New Delhi: Deep and Deep Publications. 2002) p. 97.

<sup>&</sup>lt;sup>33</sup> ibid. p. 98.

The structure of agricultural power tariff in India is uniform neither in method or magnitude. This is attributed to the fact that, SEBs as autonomous units. have had a certain degree of freedom in framing the tariff structure. Usually agricultural tariffs are metered tariffs, fixed tariffs or two-part tariffs. A metered tariff refers to a charge per unit of energy consumed. It may be a constant rate or may vary with different blocks or slabs of energy consumption. A fixed tariff is a rate based on the capacity of a pump set that is. its horsepower. It may be a flat rate for each capacity range or it could be a flat rate for each installation. The two-part tariff is in some sense a hybrid of fixed and metered rates, where there is a energy charge and then a fixed charge linked to the capacity of a pump set. In India, there are states that have consistently used a single method of levying tariff, be it fixed, metered or two-part. Other states have tried different methods at different points of time.

In 2000-01, a few states like Tamil Nadu and Punjab were providing free power to farmers.<sup>34</sup> Several others have a pure flat rate system irrespective of capacity of pump sets. Many states use graduated flat rates, one rate for pumps up to 5HP and different rates for pumps with higher capacity or load factor. Besides the flat rate tariff that farmers have to pay on a monthly basis, there is also a one-time fixed charge generally called the connection charges that farmers have to pay while getting their pumps energized for the first time. Fixing power tariffs is often at the discretion of the state government and politicians rather than the SEBs.

In contrast to agricultural tariffs, the average revenue tariff for industrial and commercial users are 360.23 and341.2paise/KWh respectively, both of which lie above the unit cost of power supply.<sup>35</sup> The average agricultural tariff in 1999-2000 was thus only around 8% of the average industrial and commercial tariffs. By charging certain consumer categories a rate higher than average cost of power supply, the power supply utility covers at least in part the deficit incurred from supply of power at a rate less than

<sup>34</sup> Mathur, n. 3, p. 95.

unit cost to certain other consumer categories (like agriculture). Thus in India, industrial and commercial consumers cross-subsidize power consumption by the domestic and agricultural sector. This is the case of almost every state and union territory in the country and in many of them, agricultural tariff is less than 5% of the average tariff on power to industries and the commercial sector.

Given the magnitude of subsidy incurred on power supply to agriculture, it is easy to figure out why SEBs are in poor health. If we look at the recovery of cost from agriculture, we can understand the situation. In 2000-01, SEBs were recovering from agriculture only 9.35% of the average unit cost of power supply.<sup>36</sup> Even after crosssubsidization, recovery from all sectors combined was still less than 70% in that year. The financial burden imposed by the pricing policy on the SEBs would further affect the spread of meager financial resources over a large number of projects, lengthen gestation lags, raise costs, hamper the ability of the SEBs to undertake modernization and up gradation of power systems in the country, and indeed affect the very growth of the power sector. The poor state of SEB finances also has implications for other sectors of the economy. One such effect is the mounting dues owed by SEBs to various central public sector undertakings, relating to electricity and fuels supplied by the later to the SEBs.37 These dues not only affect the ability of SEBs to undertake investment borrowing or to provide credible power purchase agreements for private power producers but also affect CPSU finances and their own plans to carry out expansion of capacity, investments etc. The rapidly increasing subsidies on power appear to deter public sector investments in agriculture that may slow down the growth process in agriculture. particularly when private sector investments fails to fill up the gap of public sector investments.

 <sup>&</sup>lt;sup>35</sup> K P Kalirajan, G Mythili and U Sankar, Accelerating Growth through Globalization of Indian Agriculture (New Delhi: Macmillan, 2001), p. 98.
 <sup>36</sup> ibid., p. 102.

<sup>&</sup>lt;sup>37</sup> Arjun Singh, "GATT Negotiations on Domestic support and subsidies in Agreement on Agriculture: Implications and Impacts", in Y K Alagh: (ed.), *Globalisation and Agricultural Crisis in India* (New Delhi: Deep and Deep publications, 2003), p. 95.

The first major effort at reform was as recently as 1993. Aware of the adverse impact of low tariff on the SEBs, the Ministry of Power directed states to implement a minimum charge of 50paise/KWh on agricultural consumption of power. In the beginning, only five SEBs, Himachal Pradesh, West Bengal, Assam, Meghalaya, and Tripura complied, all of whom have low agricultural consumption. In December 1996, it was proposed that the tariff for agriculture be no less than 50 paise per kWh to be brought up to 50% of the unit cost of power supply within three years.<sup>38</sup> The SEBs of Haryana, Jammu and Kashmir, Karnataka, Kerala, Orissa, Rajasthan, Goa, Sikkim, Andaman and Nicobar Islands, Chandigarh, Delhi Vidyut Board, New Delhi Municipal Corporation, Pondicherry, and Damodar Valley Corporation then revised their tariffs during 1997-98. Even in the case of those few who implemented this minimum tariff the actual realization is still much lower than 50 paise/KWh mainly due to unmetered supply. Recently, it was reiterated that all the states implement the minimum tariff of 50 paise/kWh immediately.<sup>39</sup> More states are expected to comply in the near future. The fact is that even if all the SEBs were to enforce this norm, the SEBs may still be unable to become financially viable. The introduction of the national minimum agricultural tariff of 50 paise/KWh would still leave a substantial gap uncovered. And raising tariff to 50% of unit cost apart from feasibility problems, would not be able to take pressure off both, the states as well as the cross-subsidizers.

These attempts reflect an overwhelming feeling that because agricultural power consumers are being subsidized through cheap power supplies, there must be a change in power pricing policy. The problem relates to the situation were some states are supplying free power. Recommendations like raising tariff, to mitigate the problems faced by the SEBs, will not solve the whole problem. The problem has to be studied in its entirety. India is not a power-sufficient state. Development in this field has still a long way to go. The Indian power sector has been in a state of uncertainty, ever since India joined the global trend of power sector reforms in the 1990s.<sup>40</sup> India initiated power sector reform in 1991, when a systematic approach to introduce and encourage private sector participation

<sup>&</sup>lt;sup>38</sup> Government of India, n. 14, p. 51.

<sup>&</sup>lt;sup>39</sup> ibid.

in generation was launched. This initiative was prompted by shortage of power combined with the inability of the public sector to generate surpluses for investment on the required scale. It was hoped that the private sector participation would contribute to address the shortfall in generation. The focus soon shifted to the operation of SEBs.

In December 1996, the chief ministers of states discussed the issue of power wherein it was acknowledged that the future development of the power sector could not be sustained without financially sound SEBs and improvement of their overall performance.<sup>41</sup> The Common Minimum Action plan that they proposed stated that reforms and restructuring of SEBs are urgent and must be carried out in a definite time-frame. States were to allow maximum possible autonomy to the SEBs, which would be restructured and corporatized, and run on commercial basis. The states were free to choose the way in which they would actually go about restructuring the SEBs, with the centre chalking out the broad guidelines. One example is the World Bank-Orissa model of restructuring SEBs.

Throughout, the SEBs continued to retain monopoly rights over transmission and distribution. By 1998, however, even transmission and distribution of electricity came under the sweep of reforms. Reforms of the distribution sector would be initiated by establishing distribution companies in different regions of each state. The entry of private investors would be encouraged wherever necessary. In the beginning, at least quarter of the state would be taken up for distribution reform. The whole state will be covered in four years. Consequent to the recent 1998 amendment in electricity laws, transmission activity has been given an independent status and the concept of Central and State transmission have been introduced.<sup>42</sup> Power grids would function as the CTU while the STUs would be either the SEBs or the state transmission companies that emerge from the restructuring programmes in various states. The CTU and STU, according to the Act would be government companies.

<sup>&</sup>lt;sup>40</sup> Government of India, n. 1, p.122.

<sup>&</sup>lt;sup>41</sup> A Vaidyanathan, "India's Agricultural Development Policy", *Economic and Political Weekly*, Vol. 35, No. 20, May 13, 2000, p. 1736.

A 1998 amendment to the Indian Electricity Act, 1910 now also enables private sector participation in transmission, whereby private firms can invest in construction of transmission facilities, their operation and maintenance. Their involvement would however be limited to this and would remain under the supervision and control of the STUs and CTU. The government will however continue to retain control over transmission through central grids or through the SEBs.

Along with these changes, it was felt that a new organizational structure for the power sector also demands altered forms of regulatory mechanism. The process of deregulation has been referred to as re-regulation since restructuring does not imply an absence of regulation but rather a different form of regulation. Towards this end, the government of India initiated a programme of regulatory reform in 1998.

Thus, apart from a single central regulatory authority, each state and union territory shall have an independent electricity regulatory body. At the conference of chief ministers, it was decided that each state and union territory should constitute state electricity regulatory commissions before 31 March 1999.<sup>43</sup> The electricity regulatory commission's ordinance, which has since been replaced by an Act of Parliament with certain amendments, was promulgated on 25 April 1998 for the establishment of the Central Electricity Regulatory Commissions.<sup>44</sup> Many already have functional regulatory commissions in place. These commissions, it is envisaged, would function to protect consumer's interest and create an environment for competition among participants. Among the issues these regulatory commissions would address themselves to be rationalization of electricity tariffs, transparent policies regarding subsidies, promotion of efficient and environmentally friendly policies. This would, it is hoped will lead to rationalization of tariff and also provide for transparency in the provision of subsidies, wherever necessary.

<sup>43</sup> ibid.

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<sup>&</sup>lt;sup>42</sup> Ramesh Chand, *Trade Liberalisation WTO and Indian Agriculture* (New Delhi: Mittal Publications, 2002), p. 93.

<sup>44</sup> Chaudhury, n. 14, p. 51.

The pricing policy is one of the important provisions of subsidies. The pricing policy of SEBs is one of the main reasons for the poor financial performance of state SEBs. The amount of pressure that the losses of these power utilities put on state finances is difficult to sustain. The existing structure of pricing of power (flat rates at well below unit cost of power supply) is not appropriate for the use of scarce resources like water.

The important question is who really benefits from power subsidy. Does it really benefit the agriculture sector? Since agriculture power consumption is not metered and is obtained as a residual figure, the result is that at least a portion of unaccounted power consumption, which goes to non-agricultural users, is written into the figure for agricultural power consumption. Overall, agricultural power consumption may be overstated to the extent of 40% in some cases. Moreover, the inefficiency of the SEBs as retlected in the artificially high cost of power supply, inflate the figures of power subsidy to agriculture. As a result, the numbers presented commonly as subsidy on power supplied to agriculture, in fact, includes the cost of the SEBs inefficiency as well as implicit subsidization of power theft.<sup>45</sup>

The next important input subsidy offered in India is on irrigation. Unlike fertilizer subsidy, the subsidy on public irrigation is not stated explicitly by the government.<sup>46</sup> It has to be extracted from government data sources and is often done in more than one way. The method commonly employed for this purpose is based on the concept that the irrigation subsidy can be approximated as the losses that the input supplying agency incurs on account of supplying irrigation water at concessional rates. Under this method, irrigation subsidy is obtained by using what is termed in the national account statistics as imputed charges on irrigation and deducting the consumption of fixed capital or depreciation of the government.

# 45<sup>°</sup>ibid.

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<sup>&</sup>lt;sup>46</sup> Government of India, n. 1, p. 4.

Departmental enterprise in agriculture, in this case, refers to the irrigation department. According to the National Accounts: Sources and Methods, these imputed irrigation charges as given in the national accounts statistics are equal to the losses incurred on the irrigation and are treated as subsidy in the income and outlay account of the administrative departments. Further, the sources and methods also mentions that in case of irrigation subsidies, the imputed irrigation charges include grants made by the government to the departmental commercial undertakings or public corporations in the form of compensation for operating losses when such loss is the result of maintaining prices at a level at which the public industry will not cover the current cost of production.<sup>47</sup> The series of estimates so generated is regarded as representing government subsidies on public irrigation.

These estimates implicitly define irrigation subs.  $\gamma$  as the difference between cost of supplying water for irrigation and the revenue received as payment from the users of irrigation water. It is assumed that the losses of the irrigation department are on account of supplying water at concessional rates.<sup>48</sup> However, this definition of subsidies is incomplete and the estimates are inaccurate for a number of reasons. The main drawback with these estimates is the lack of understanding on what actually constitutes imputed irrigation charges and this raises several questions.

The main question is : does the cost of providing service reflect the true costs of delivering irrigation water? Apart from the operation and maintenance costs, and other current expenses, huge capital expenditures are incurred on the provision of irrigation. If this area is excluded it would understate the cost incurred by the input-supplying agency. Most state governments are beneficiaries of loans forwarded to them by the central government. While a part of it is a grant, a large part of it is in the form of a loan. The interest rate (8-10%) typically differs from state to state.<sup>49</sup> Even if the interest is accounted for in these estimates, the actual rate of interest charged by the central

<sup>&</sup>lt;sup>47</sup> C H Hanumantha Rao, "WTO and Viability of Indian Agriculture", *Economic and Political Weekly*, Vol. 36, No. 36, September 8, 2001, p. 67. <sup>48</sup> ibid., p. 69.

<sup>&</sup>lt;sup>49</sup> ibid., p. 71.

government is minimal and sometimes nil and diverges significantly from the opportunity cost of such funds. About the issue of grants that flow from centre to state, it is essential to include imputed interest on the grant as well, if true interest burden is to be arrived at. Some scholars point out that depreciation also needs to be taken into account, which would then reflect the consumption of fixed irrigation assets on replacement cost basis. Its inclusion will yield the true extent of irrigation subsidy.

An exact estimate of subsidies in irrigation is difficult to arrive at. The magnitude of subsidies on canal water depends on who really benefits from it. Broadly, irrigation subsidy, like power subsidy, can be viewed from three different perspectives: the farmers' point of view as a user of water, the perspective of the irrigation authority supplying irrigation water and from perspective of society at large.<sup>50</sup>

The concept of irrigation subsidy adopted is based on the difference in the cost of supplying irrigation water and what the farmers pay for irrigation water at its direct price. Like the method adopted in the estimation of power subsidies irrigation subsidies represents the perspective of the supplying agency. Accordingly, the focus is on estimating the cost of public irrigation water through major and medium irrigation schemes, as also minor irrigation schemes, and the payments made by farmers for irrigation water.

The approaches followed for major and medium irrigation schemes have to be looked at. The cost of irrigation through major and medium schemes comprises three components. a) capital cost, b) working cost of operation and maintenance and c) depreciation.<sup>51</sup>

The capital cost is incurred over a number of years. In a representative major irrigation project, it is common to find that capital costs are spread over 20 years, out of which there can be a period of the first seven years, when no potential is created and only

<sup>&</sup>lt;sup>50</sup> Mathur, n. 3, p. 147.

capital expenditure is incurred. Thereafter, some irrigation potential may be forthcoming even as capital expenditure continues to be incurred. Gestation lags – the time gap between expenditure incurred and irrigation potential created – vary from project to project, but are generally longer for major projects and shorter for medium projects. In an earlier study based on a detailed survey of 347 projects, it was found that roughly the length of gestation lag in India is approximately 12 years.<sup>52</sup> Given this, expenditure incurred in the past need to be adjusted to take care of gestation lags to accommodate the phenomenon of pure time preference. The PTP basically implies that one rupee today is more valuable than one rupee tomorrow, even at constant prices, as the present has a premium over the future. This happens because the future is expected to be more prosperous indicating that the marginal utility of money tomorrow would be less than what it is today.

The role of irrigation in enhancing agricultural production is well established and a significant increase in production, especially food grains, over the years can be attributed to increasing irrigation in the country. It promotes faster adoption of high-yielding variety of seeds, fertilizer consumption, and other inputs associated with intensive agriculture .As a result of these inputs, the yield on irrigated plots in 1992-93 tended to be 2.3 times that on un-irrigated plots.<sup>53</sup>

53 ibid.

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 <sup>&</sup>lt;sup>51</sup> S B Singh, "Agricultural-Revolution: Issues and Options", M K Santanam, (ed.), 50 Years of Indian Republic (New Delhi: Ministry of Information and Broadcasting, 2000), p. 249.
 <sup>52</sup> ibid.

### **CHAPTER 3**

# WTO AND SUBSIDIES TO AGRICULTURAL SECTOR

The Agreement on Agriculture (AoA) that was part of the Uruguay Round of WTO brought agriculture trade, effectively for the first time. under the auspices of a multilateral trading system<sup>1</sup>. Agriculture had not only been included in the original GATT of 1947 but given a special status, mainly at the insistence of the United States, which agreed to sign the agreement on condition that there would be exceptions (section 11 of GATT) in the rules for agricultural products. In the years that followed World War II, the world witnessed liberalization of international trade by the industrial countries. based on negotiations undertaken under the aegis of GATT.<sup>2</sup> However, for many decades the liberalization remained confined to industrial products and for most temperate-zone agricultural products the trend was towards increased protection rather than liberalization

Government intervention in order to protect farm incomes had a long history in most industrialized countries, but the policy of intervention received a major boost after the War. The agricultural situation in these countries became weak as a result of the rapid rise of urban industrial wages in the wake of industrial prosperity, which accelerated the exodus of population from the rural agricultural sector, to cities. Given the concern for food security, governments acted to ensure that the rural agricultural wages maintained a level with urban industrial wages. The mechanism used in most cases was the price support system for agricultural products.

Prior to the Uruguay round, trade in agriculture was highly distorted.<sup>3</sup> Market access for agricultural products was limited as physical import barriers restricted most markets. The presence of massive domestic subsidies led to over production of temperate

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<sup>&</sup>lt;sup>1</sup> http://www.kisanwatch.organization/eng/wto/sep02/AoA.pdf.

<sup>&</sup>lt;sup>2</sup> ibid.

crops in the developed countries.<sup>4</sup> Combined with stagnating demand for temperate crops in these countries, this led to excess supply, and export subsidies were used to dump the surplus agricultural output in international markets. This resulted in depressed market prices and, in spite of being low-cost producers of agricultural products, agricultural exporters from developing countries could not compete with the subsidized exports from developed countries. Only a handful of players were active in the global market and this marginal nature of the global farm trade resulted in high price fluctuations of agricultural commodities.

The Uruguay Round AoA marked a significant departure from the trend, in the sense that the AoA was an attempt to impose discipline on global agricultural trade by removing trade distortions resulting from unrestricted use of production and export subsidies and import barriers, both tariff and non-tariff.<sup>5</sup> It was expected that the agreement would bring about a structural change in agricultural trade and a less distorted trading regime in which more efficient agricultural producers would stand to benefit. A finding of the likely effect of AoA on world markets predicted that reduction in domestic support and export subsidies in the developed countries would lead to a deepening of world trade in agriculture, an increase in the share of developing countries in global agricultural exports and more transparency in agricultural trade.<sup>6</sup>

However, after five years, the evidence showed that the actual impact of AoA on agricultural policies has been far less than expected. Problems of implementation are responsible for this.

Policy formulation and implementation are two different things. When policy is formulated, certain practical issues are not taken into consideration. Negotiators consist mainly of officials and technocrats, who are experts in their relevant field. However, the

<sup>6</sup> ibid., p. 36.

<sup>&</sup>lt;sup>3</sup> Constantine Michalopoulos, "Developing Country Strategies for the Millennium Round", *Journal of World Trade*, Vol. 33, No. 5, October 1999, p. 2. <sup>4</sup> ibid.

<sup>&</sup>lt;sup>5</sup> P K Vasudeva, India and WTO: Planning and Development (New Delhi: APH Publishing Corporation, 2000), p. 34.

practical side involves farmers also. The farming community around the world continues to be largely unaware of the technicalities. This leads to problems, when it comes to the actual implementation. The areas covered under the AoA are given below:

## **Domestic Subsidies**

During the Uruguay Round negotiations, it was recognized that domestic support distorts trade and that it is necessary to impose restrictions on it.<sup>7</sup> Domestic support encourages overproduction, especially by developed countries. This in turn increases supplies in world markets (by reducing import demand or increasing export supply) and depresses world prices. AoA differentiates between support programmes that directly aid production and trade, and those that are considered to have no direct effect. AoA does not impose restrictions on the later category. Support measures that are exempt from reduction commitments are categorized as blue box and green box subsidies. Production and trade- distorting subsidies are classified as Amber box subsidies, and are subject to reduction commitments. AoA allows developed countries to have amber box subsidies up to 5% of the value of agricultural production. This is called de minimum level. Amber box subsidies above the minimum level come under reduction commitments. It was agreed that developed countries should reduce their Amber box subsidies from the base period level (1986-88) over a period of five years (1992-2000) by 20 percent.

The domestic support component of the agreement on agriculture are explained below:.

# Green Box Measures<sup>8</sup>

 <sup>&</sup>lt;sup>7</sup> R G Desai, "Challenges to Agriculture in India Under WTO Regime", in B Sambasiva Rao (ed.), Agriculture in India Policy and Performance (New Delhi: Serial Publications, 2003), p. 69.
 <sup>8</sup> M M Ahmad, M A Khan, "WTO Challenges and opportunities-A Case of Indian Agriculture", in D Panduranga Rao (ed.), WTO and Competitiveness (New Delhi: Excel Books, 2001), p. 287.

Policies that have the minimum impact on production and less trade distorting are classified as Green box measures. These include:

a) Government assistance on general services like research, pest and disease control, training, extension and advisory services.

b) Public stock holding for food security purpose.

c) Domestic food aid.

d) Direct payment to producers, such as government financial participation in income insurance and safety nets, relief from natural disasters.

e) De-coupled income support. Government financial participation in income insurance and income safety net programmes.

f) Payments (made either directly or byway of government financial participation in crop insurance schemes) for relief from natural disasters.

g) Structural adjustments assistance provided through producer retirement programmes, resource retirement programmes and investment aids.

h) Payments under environment assistance programmes.

i) Payments under regional assistance programmes.

Green box policies, for the most part, will affect farmers only in affluent countries whose governments are able to pay for the producer retirement programmes and resource retirement programmes.<sup>9</sup> As per AoA terms and conditions, the subsidy on producer retirement must be conditional on total and permanent retirement of the recipients from marketable agricultural production. Similarly, subsidy for resource retirement must be conditional on retiring land from marketable agricultural production for at least three years, and in case of livestock, on its slaughter or permanent disposal. Thus, the farmers can get assistance for leaving farming or livestock but not for staying active as producers

**Blue Box Measures**<sup>10</sup>

 <sup>&</sup>lt;sup>9</sup> Sompal, "WTO Agreement and Indian Agriculture", in Anwarul Hoda (ed.), WTO and Indian Agriculture (New Delhi: Social Science Press, 2002), p. 6.
 <sup>10</sup> ibid.

These measures include direct payments to the farmers for production limiting programme, and are relevant from the point of view of the developed countries alone. These policies are allowed as long as the supports are de-coupled from production supports. It means that direct payments can be provided to support incomes of farmers and that overall cost of production will not be reflected in the price of commodities. In effect, these exclusions imply that incomes of farmers in industrialized countries will be directly paid by the governments and will not be influenced by trade. On the other hand since incomes of third world farmers are derived from production and trade and not from direct income support from the governments they will be totally at disadvantage to change in global trade patterns and international prices of agricultural commodities. The creation of the Blue Box was a last minute compromise in the Uruguay Round that allowed the European Union to continue compensatory payments under 1992 CAP reforms. It also allowed the US to exempt deficiency payments, a type of domestic subsidy aimed at supporting farm income utilized until 1996.

# Amber Box Measures<sup>11</sup>

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These are the most important measures from the point of view of the producers in developing countries which demand commitment to reduce support to be achieved by quantification of domestic support, that is, the Aggregate Measure of Support. AMS consists of two parts: (i) product specific subsidies, that is the difference between the administered prices (minimum support prices in India) and external reference prices, times the quantity which gets such support (ii) non-product specific subsidies, that is, subsidies on inputs such as fertilizers, electricity, irrigation, etc. The AMS, net of exempted categories of support measures, is subject to reduction commitments. The support is to be reduced by 20% of the country's1986-1988 level in case of developed countries and 13% in case of developing countries over a period of six years (1995-2000) and ten years (1995-2004) respectively. The domestic support given to the agriculture

<sup>&</sup>lt;sup>11</sup> Arjun Singh, "GATT Negotiations on Domestic support and subsidies in Agreement on Agriculture: Implications and Impacts", in Y K Alagh (ed.), *Globalisation and Agricultural Crisis in India* (New Delhi: Deep and Deep Publications, 2003), p. 97.

sector within the specified permissible level, that is, upto10% of the agricultural production in developing countries and 5% in developed countries is allowed. AMS, within this limit is not subject to any reduction commitment. Currently, in India, the minimum support price provided to commodities is less than the fixed external price (1986-88) determined under the agreement.<sup>12</sup> The subsidies on agricultural inputs, such as power, irrigation, fertilizers, etc, are well below the minimum permissible level of 10% of the value of agricultural output. Therefore, India is under no obligation to reduce domestic support currently extended to the agricultural sector.

Policies that do have a substantial impact on the patterns of production and flow of trade are classified as amber box policies and are subject to reduction. They include budgetary outlays, foregone revenues and payments at the national and sub-national levels. Additional subsidies enjoyed by the global agribusiness and trading interests such as subsidies for investment, fertilizer, marketing and infrastructure are all exempted. Though India is under no obligation to reduce product specific and non-product specific subsidies according to AoA, Indian agricultural subsidies related to water and power are being removed under the World Bank structural adjustment programmes, which means that while support to the farmers has been declining, support and subsidies for urea in India, increased from Rs.16.7 billion in 1996-97 to Rs.20 billion for 1997-98.<sup>14</sup>

Further, the politics of subsidies of WTO favour industry and Northern interests and goes against farmers of the developing countries. In the WTO, complications and disagreements arise frequently as there are several issues over which the developed and developing countries do not agree.

<sup>&</sup>lt;sup>12</sup> ibid., p. 98.

<sup>&</sup>lt;sup>13</sup> Ashok Gulati and Sudha Narayanan, *The Subsidy Syndrome in Indian Agriculture* (New Delhi: Oxford University Press, 2003), p. 72.

<sup>14</sup> ibid.

### **Export Subsidies**

Article 8-11 of the AoA deal with export subsidies.<sup>15</sup> The official justification for the AoA is the removal of export subsidies that have facilitated the sale of large EU and US surpluses in the world markets. The main features of export subsidy commitments are given below:

a) Export subsidies, measured in terms of both the volume of subsidized exports and budgetary expenditure on subsidies, based on 1988-90 average price, have been capped.

b) Developed countries are committed to reducing the volume of subsidized exports by 21% and the expenditure on subsidies by 36%, both over a six-year period (1995-2000).

c) Developing countries are committed to reducing the volume of subsidized exports by 13% and the expenditure on subsidies by 24%, both over a ten-year period (1995-2004).<sup>16</sup>

The widespread use of export subsidies is one of the most important causes for the disruption in world agricultural trade, because large export incentives are given to exporters in developed countries, to increase exports to developing countries. Agriculture is an exception because, export subsidies are prohibited by the WTO in all other sectors.<sup>17</sup> Export subsidies lead to inefficiencies and high costs that have to be borne by consumers and tax-payers in the subsidizing country.

Countries, which do not subsidize their exports, are affected in several direct and indirect ways. In general, export subsidies increase the share of the exporter in the world market at the cost of the others. They tend to depress world market prices and make them

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 <sup>&</sup>lt;sup>15</sup> Sompal, "WTO Agreement and Indian Agriculture", in Anwarul Hoda (ed.), WTO and Indian Agriculture (New Delhi: Social Science Press, 2002), p. 6.
 <sup>16</sup> ibid.

unstable because decisions on export subsidy can be changed unpredictably, thereby causing random changes in the volume and prices of the exported commodity.

AoA requires that both the amount of export subsidies and the quantities that receive export subsidies should be reduced over the implementation period. Though most WTO members reduced export subsidies in the post-Uruguay round phase, their continued presence led to distortion in global markets. Export credit, which has a similar distortionary effect, is not disciplined under AoA. In the Uruguay Round agreement, export credit programmes were not specifically listed as subsidies subject to reduction commitments, but were given a special status that exempted them from such commitments. Though it was not explicitly mentioned, it was agreed that the talks on export credit would continue in the OECD, and an agreement placing limits on export credit conditions and terms and length of credit extension would be negotiated.

Data show that the use of export credit for agricultural products has gone up in the post-Uruguay round phase. In the OECD countries, use of export credit has increased from US \$ 5.5 billion in 1995 to US \$7.9 billion in 1998.<sup>18</sup> The US accounts for about 46 % of total export credit, while Australia and the EU account for 25 and 16 % respectively.

The sustained decline and high volatility of international agricultural prices are evidence of continued distortions in world agricultural trade even after five years of implementation of AoA. The main reasons attributed have been the increased over supply in the world agricultural markets by the rich countries. The level of supply by the rich countries is too much that they dwarf the entire third world put together. This is evidence of the depressed world agricultural prices. The third world should strive to drive a hard bargain in the forthcoming negotiations in the price front.

 <sup>&</sup>lt;sup>17</sup> R G Desai, "Challenges to Agriculture in Indian under WTO regime", in B Sambasiva Rao (ed.), Agriculture in India Policy and Performance (New Delhi: Serial Publications, 2003),p. 70.
 <sup>18</sup> http://europa.eu.int/comm/environment/wssd.

# **Special and Differential Treatment**

The Uruguay Round AoA contains provisions intended to give developing countries greater flexibility in meeting commitments. Special and differential treatment. arose because of fears that globalization, in the short term, may threaten developing countries economic well-being and food security.<sup>19</sup> The provisions regarding special and differential treatment revolve around market access, export support and domestic support.<sup>20</sup> The least developed countries were largely exempt from reduction commitments.

Many of the special and differential treatment policies are intended to encourage economic development in developing countries. Certain input subsidies for low-income or resource-poor producers are exempt from Amber box discipline.<sup>21</sup> Developed countries are allowed to provide export support for reducing marketing costs and to provide subsidies for internal and external transportation of exports. Developed countries are also encouraged to open access to tropical products.

Other special and differential treatment provisions relate to food security. Developing countries are allowed to maintain tariffs on products of importance for food security. Food security stocks are exempted from domestic support provisions. as are subsidies for selling foodstuffs to the rural and urban poor. Developing countries have, however, pointed out the high degree of specificity and limited applicability of the special and differential treatment provisions, particularly in terms of domestic support. They compare the somewhat limited developing country exemptions with the amount of protection allowed, mainly for the benefit of the European Union. by the Blue box and the broad and vaguely defined Green box from which the United States benefits most.<sup>22</sup>

<sup>21</sup> ibid., p. 41.

<sup>&</sup>lt;sup>19</sup> Thomas C Beierle, From Uruguay to Doha: Agricultural Trade Negotiations at the WTO (Washington DC, 2002), p. 37.

### **Market Access**

Market access is an area where the Uruguay round of AoA caused a shift in global agricultural trade. AoA prohibited the use of non-tariff-barriers like quotas and import restrictions for agricultural products and introduced tariffication. Tariffication required that all non-tariff barriers, barriers other than tariffs, which impede trade, like sanitary and phytosanitary measures, to be disciplined. On the import of an agricultural product would have to be replaced by a single bound tariff rate so that the resulting protection would be equivalent to the nominal protection in the base period. Nominal protection is measured by calculating the difference between domestic prices and international prices for the reference period 1986-90. Bound rate implied that the base period tariff rates were to act as ceiling rates. No country was allowed to increase tariff rates beyond the bound rate. AoA stipulated that the average bound tariff rate of agricultural products would have to be reduced over a period of time with a minimum cut on the tariff rate for each product. Developing countries were given the additional flexibility of offering bound rates for agricultural products. This implied that for fixation of tariff for agricultural items, developing countries did not necessarily have to calculate the tariff equivalent but could propose a tariff rate that is appropriate for the concerned product.

Tariffication led to the concern that it could result in high bound tariffs which, if applied, could be prohibitive for any trade to take place. This gives rise to the concept of minimum market access, whereby WTO members were required to maintain current import access opportunities at a certain minimum level. This was achieved through the tariff rate quota, which is a two-level tariff with the rate charged depending on the volume of imports. A lower tariff is charged on imports to ensure minimum market access or the quota volume and a high tariff is charged on imports in excess of the quota volume. Studies on effectiveness of the market access reforms reported mixed success. One of the biggest achievements of AoA is that for most agricultural products NTBs have been abolished and tariff bindings have been applied. The world average of agricultural tariff is as high as 62 percent and average tariffs tend to be higher in developing countries than in developed countries.<sup>23</sup>

The high tariff rate in agriculture is a result of what is known in WTO methodology as dirty tariffication.<sup>24</sup> Countries often intentionally overestimated equivalent tariffs by inflating the gap between domestic and international prices. This practice was used frequently by countries to set some base tariffs for certain sensitive commodities at levels that provide greater protection than had existed in 1986-88.

Though the average tariff in the developed countries is low, most of these countries have managed to maintain a very high level of tariff rates on sensitive products. The guidelines for tariffication in AoA allowed government's considerable flexibility in interpretation and consequently, most countries interpreted them in ways that best benefited their domestic interests. The commitment of reducing tariffs by 36 percent was based on a simple average. By making rather large cuts in tariffs for commodities that do not compete with domestic production on large percentage cuts in tariffs that were already low, the 36 percent average reduction could be achieved with minimum cuts in politically sensitive tariffs, or tariff peaks, reaching 350 percent or more on sensitive products like dairy, sugar and tobacco.<sup>25</sup> A recent OECD study on border protection showed that actual border protection to agriculture was higher in 1996 compared to 1993, in eight out of ten OECD countries.<sup>26</sup> Studies reveal that in most developed countries temperate products tend to attract much higher tariff than tropical products.

Tariffs in most countries also tend to increase with the level of processing. This is called tariff escalation.<sup>27</sup> Tariff escalation discourages exports of value added

<sup>&</sup>lt;sup>23</sup> R Thamarajakshi, "Doha Declaration and Agriculture in Developing Countries", *Economic and Political Weekly*, Vol. 37, No. 1, January 5, 2002, p. 24.

<sup>&</sup>lt;sup>24</sup> ibid.

<sup>&</sup>lt;sup>25</sup> M Lakshmi Narasaiah, *World Trade Organisation and the Developing Countries* (New Delhi: Discovery Publishing House, 2001), p. 172.

 <sup>&</sup>lt;sup>26</sup> John Croome, Guide to the Uruguay Round Agreements (The Hague: Kluwer Law International. 1999), p. 93.
 <sup>27</sup> ibid.

commodities. The problem of tariff escalation for developing countries has been explained well in a submission to the WTO by a group of developing countries. As a trade barrier, tariff escalation is becoming more and more of an issue since trade is rapidly shifting to processed products. Further, this is also a major obstacle for developing countries interested in escaping from the cycle of producing and exporting primary products and earning less and less given the worsening terms of trade for primary commodities. Tariff escalation prohibits diversification, which is very important for developing countries economies, particularly as most of the value added is created at a later stage of production. Unfortunately, due to the tariff structures in OECD countries. the value added from processing is largely captured by the developed countries.

Developing countries allege that tariff peaks and tariff escalations effectively block imports from developing countries in the developed world. A study found out that tariff peak products tend to be heavily concentrated in agriculture and food products, and in labour- intensive sectors such as apparel and foot wear. As far as TRQs are concerned, while they have potentially opened up some new market access opportunities, the fill rate of tariff quotas, has remained low. A study by WTO shows that between 1995 and 1998, the simple average fill rate for all quotas fell from 66 percent to 62 percent.<sup>28</sup> This low fill rate can be a result of the high level of certain in-quota tariff rates, but is also possible that the lack of transparency in their administration has created problems for market access.

Also, the broad product classified for TRQs allowed under Uruguay Round has prevented opening up minimum access in some sub-products within this broad product category. Finally, the setting of within-quota tariffs under Uruguay Round has been very uneven and, although many of the TRQs have been opened at low or zero tariffs, there are some cases where within-quota tariffs are so high and imports may not take place. Studies show that TRQs are associated with high tariffs and sensitive sectors. The average over- quota tariff is 128, more than double the average tariff for all agricultural

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<sup>&</sup>lt;sup>28</sup> Sanjoy Bagchi, "Seattle to Qatar: World Trade Negotiations", *Economic and Political Weekly*, Vol. 36, No.43, October 27, 2001, p. 4046.

products. According to a study, the estimated average in-quota tariff rate is as high as 63 . percent, 1 percent higher than the overall average. The tariffication process in AoA asked for low or minimum tariff rates for in-quota tariff, but did not quantify this rule. The average in-quota tariff of 63 percent clearly demonstrates that the spirit of TRQ has been violated in this case.

#### Sanitary and Phytosanitary Measures

These measures were supposed to be standardized and universalized in terms of specifications as applicable to food, disease transmission, and bacterial, viral and fungal infection transmission.<sup>29</sup> These standards covered transparent processes, procedures and institutional development through plant protection and quarantine facilities, test labs, and accredited certification agencies have to be taken up urgently.<sup>30</sup> The developing countries require assistance in these matters from developed countries and the procedures and rules for their application need to be thoroughly transparent. This has assumed significance in view of the current practice followed by the developed countries to use these selectively to the detriment of developing countries.

### **Implications for Developing Countries**

It is evident that though AoA has introduced some discipline in world agricultural trade, distortions still exist.<sup>31</sup>

Distortions in agricultural trade are hurting the developing countries most. Trade distortions like huge subsidies given by developed countries, including tariffs and export subsidies, affect the trade in agricultural products.<sup>32</sup> These issues have been some of the most contentious, especially the provisions relating to domestic support, because the

<sup>30</sup> ibid.

<sup>31</sup> ibid.

<sup>&</sup>lt;sup>29</sup> Devinder Sharma, *GATT and India: The Politics of Agriculture* (New Delhi: Konark Publishers. 1994). p.151.

subsidy given by developed countries, is very high. The other issue is the one relating to the continuance of high tariff rates, which impede exports from the developing countries. For the agricultural exporters among developing countries, continuous decline in commodity prices exert a downward pressure on their export earnings.<sup>33</sup> This problem is most severe for countries that depend on agricultural exports for their foreign exchange earnings.

In most developed countries, significant market access barriers still exist for products where they have export interests. Tariff peaks and tariff escalations effectively peg developing countries to the bottom end of the value chain and force them to continue as primary commodity exporters thereby denying them the advantage of value addition. Also, developing countries are finding it increasingly difficult to match the high sanitary and phytosanitary standards adopted by developed countries.<sup>34</sup> Food and agriculture organizations investigations has revealed that developing countries are experiencing increasing trade obstacles due to sanitary and phytosanitary measures.

On the other hand, cheap and subsidized imports from developed countries can create problems for domestic agriculture producers in most developing countries and can lead to a substantial decline in domestic farmers' income. The instability of international commodity prices, which witnesses fluctuations in Agricultural commodities prices, due to demand and supply constraints also introduces uncertainty factors in the domestic markets. It is to be noted that most developing countries are not part to the special safeguard provisions of AoA, which allows imposing protectionist measures in the event of increased imports. However it should be emphasized that developing countries. especially the agricultural exporters, stand to gain much from further and meaningful liberalization of agricultural trade. So far, all the implementation problems of AoA have benefited the developed countries. If these issues can be, resolved, developing stand to gain from AoA.

<sup>&</sup>lt;sup>32</sup> B Bhattacharya, "Implications of the WTO", *Focus*, Vol. II, No. 5, January-February 2001, p. 9.

<sup>&</sup>lt;sup>33</sup> M B Rao, *WTO and International Trade* (New Delhi: Vikas Publishing , 2001),p. 96.

 <sup>&</sup>lt;sup>34</sup> C H Hanumantha Rao, "WTO and Viability of Indian Agriculture", *Economic and Political Weekly*, Vol. 36, No. 36, September 8, 2001.

A second phase of negotiations in AoA is currently taking place. These negotiations are being conducted under Article 20, an article that committed members to start negotiations on continuing the reform process from the end of 1999.<sup>35</sup> In this second phase, developing countries are getting another chance to press for a more liberalized and less distorted trade regime. In this current round, it is important that the developing countries make their opinions count and manage to close the loopholes in the existing agreement. However, the task is not easy. The developing countries are a divided group and can have diverse interests. For example, high tariff rates in developed country markets help countries that have preferential tariff agreements in these countries to avoid competition from other developing countries.<sup>36</sup> Therefore, it is in their interest that developed countries maintain a high level of domestic protection. The EU has made this situation even more complicated by allowing duty -free access to its market for the least developed countries. Similarly, net food importing countries support export subsidies because it lowers their food import bill. But most of these considerations are short term in nature. Developing countries should understand that a free and fair agricultural trade system will be beneficial for them in the longer run. Unless they manage to forge some sort of a coalition it will be difficult for them to move ahead in the three major areas of agricultural trade reform, that is, market access, domestic protection and export subsidies.

Another area that is equally or perhaps even more important for developing countries concerns the issues of food security and rural development. These issues have not been addressed properly in the Uruguay round of AoA as its main focus was on reforming developed country farming. If any meaningful trade liberalization takes place in agriculture, it is likely that food prices will increase. It is necessary that developing countries, particularly food-importing countries, are given special privileges to counter this increase in food prices. This was recognized by the Uruguay round. Article 16 of AoA mentions, developed country members shall take such action as is provided for within the framework of the decision on measures concerning the possible negative

<sup>35</sup> ibid.

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<sup>&</sup>lt;sup>36</sup> A Damodaran, "WTO Agriculture Agreement, Common Property Resources and Income Diversification Strategy", *Economic and Political Weekly*, Vol. 36, No. 38, September 22, 2001, p. 67.

effects of the reform programme on least developed and net food-importing developing countries.<sup>37</sup>

This directive turned out to be totally ineffective in providing any assistance to the concerned countries. In this article AoA did not stipulate any obligations but put it as a best endeavour clause. In the next round the developing countries plan to ask for firm commitments instead of clauses like this. It should be recognised that developing countries are at a different stage of economic development and their capacity to integrate with the global economy is limited. Paragraph 13 of the Doha ministerial declaration acknowledges these problems.<sup>38</sup>

## Freeing Trade in Agriculture

Trade in agricultural products comprises 9.1% of world merchandise trade.<sup>39</sup> In 2001, this trade was worth \$ 547 billion. The figures for 2001 showed that the EU shared 39% of agricultural exports, and 39.71% of agricultural imports while the US shared 12% of agricultural exports, and 11% of agricultural imports.<sup>40</sup>

# Agriculture in Wealthy Countries

In the European Union, the United States, Australia, New Zealand, Japan, Norway, Iceland, Switzerland, agriculture is practiced by very few people who use modern technologies such as tractors, synthetic pesticides and fertilizers, hybrid and genetically modified seeds.<sup>41</sup> These technologies allow for intensive use of land and highly efficient crop production Moreover, these countries have invested hugely in efficient food processing technologies, marketing, and distribution. Refrigeration,

<sup>&</sup>lt;sup>37</sup> Thamarajakshi, n. 24, p. 96.

<sup>&</sup>lt;sup>38</sup> Arvind Panagariya, "India at Doha: Retrospect and Prospect", *Economic and Political Weekly*. Vol. 37. No. 4, January 26, 2002, p. 90.

<sup>&</sup>lt;sup>39</sup> http://www.organization-omcmexico.organization.mx.

<sup>40</sup> ibid.

<sup>-&</sup>lt;sup>41</sup> ibid.

transport, and sophisticated packaging mean that less food is wasted, and consumers . generally buy food at central supermarkets rather than growing it themselves.

More than 70% of the population of low-income countries lives in rural areas, and 97% of their rural population are engaged in agriculture<sup>42</sup>. Poor farmers generally earn meagre incomes from farming, and they engage in a daily struggle against pests, weeds, weather, and poor soil. They use traditional technologies and extensive farm labour to grow a small amount of food. This leads to an inefficient production system. Their situation is made worse by poor legal systems that do not support land tenure, poor infrastructure, lack of credit, and lack of investment. Unlike wealthy countries, there is not widespread use of refrigeration and packaging materials, so a large percentage of food, gets spoilt before it is consumed. Poor farmers and their families tend to eat a diet of staple crops that they grow, rather than having a diversity of food choices available from stores.

## **Agriculture and Modern Technology**

Today farmers lose about 42% of their crops to pests, despite all efforts to control them.<sup>43</sup> This is a huge loss of productivity but without modern technologies-pesticides, fertilizers, mechanization-crop losses would be nearly 70% of global production. Modern technologies make farmers lives easier, and allow farmers to escape the situation of subsistence agriculture. Modern technologies improve the quantity and quality of food for consumers, and they have reduced malnutrition in the world. Though the population of the world has increased by 90% since 1950, the real price of food commodities has declined by 75%. Greater agricultural productivity and international trade have made this possible. As a result, average daily food suppliers per person increased 24% globally from 1961-98. The increase for developing countries was even larger, at 38% between 1969-71 and 1995-97 such increases in food supplies reduce the number of chronically.

 <sup>&</sup>lt;sup>42</sup> Fabian Delcros, "The Legal Status of Agriculture in the World Trade Organization", *Journal of World Trade*, Vol. 36, No. 2, April 2002, p. 223.
 <sup>43</sup> ibid.

undernourished people in developing countries from 920 million to less than 800 million, . despite a 70% increase in population

Other factors that distort agricultural production and trade are:

*Regulations*: Farmers in wealthy countries have lobbied for regulations that are used to restrict trade in products from other countries, whether intentionally or unintentionally.<sup>44</sup> These act as de facto barriers in the US,EU and Japan to trade for poor farmers.

*Taxation on export crops*: In Africa, for instance, taxation has been heaviest on export crops. The form of taxation has varied, sometimes being predominantly through explicit export taxes, but more commonly through exchange rate overvaluation, over-funded price stabilization schemes, and wide marketing margins taken by monopoly purchasing organizations.

Lack of infrastructure physical, legal and financial: Most poor countries are extremely corrupt and do not have appropriate legal system to fairly and transparently deal with contractual arrangements. As a result, they generally lack sophisticated financially markets which would give farmers access to information about market prices, to help them with long term decisions. A lack of physical infrastructure and packaging means that a large percentage of all agricultural goods are spoilt before they can reach urban markets, thus making food more expensive.<sup>45</sup>

**Domestic regulations:** Domestic regulations can distort trade in agricultural goods. Subsidies provided by developed countries prove to be distortionary. Sometimes this is intentional because higher-cost producers may see regulations as way to protect themselves from lower-cost competitors. Sometimes it is unintentional, the effect of taxes on inputs and restrictions on investments flows also distort trade in agricultural goods.

 <sup>&</sup>lt;sup>44</sup> Klaus Gunter Deutsch and Bernard Speyer, *The WTO Millennium Round: Freer Trade in the 21<sup>st</sup> Century* (London: Routledge, 2001), p. 203.
 <sup>45</sup> ibid., p. 206.

Tariff escalation:<sup>46</sup> When countries charge a higher tariff on processed goods, such as chocolate, it discourages companies from investing in processing facilities where goods are produced, and it protects higher-cost labourers and industries. Companies have to incur huge capital expenditure for setting up facilities. This discourages the companies.

Suppressing food prices for urban population: Poor countries hurt their own farmers by suppressing food prices to provide urban populations with cheap food.<sup>47</sup> Agricultural intervention in developing countries is severely biased against the farmers, whereas in developed countries the pro-farmer agricultural policies are distortionary and merely encourage inefficient use of valuable agricultural resources, by guaranteeing high output prices and direct payments to maintain farm incomes.<sup>48</sup>

## **Trade Distorting Effects of Subsidies**

Agricultural subsidies cause farmers in wealthy countries to overproduce commodity crops, and the surplus is dumped on world markets. This dumping drives down agricultural prices on the world markets, and eliminates the competitive price advantage the farmers in poor countries would otherwise experience, thus excluding poor farmers from markets in wealthy countries.<sup>49</sup>

# Subsidies shield farmers from the realities of the market

According to the OECD, farmers in many countries remain shielded from world market developments.<sup>50</sup> Whereas prices received by farmers were, on average, the same as those at the border in Australia and New Zealand, they were 10% higher in the United States, 35% higher in the European Union and more than 100% higher in Iceland. Japan.

<sup>46</sup> ibid.

<sup>&</sup>lt;sup>47</sup> Kevin C. Kennedy, "Reforming Farm Trade in the Next Round of WTO Multilateral Trade Negotiations", Journal of World Trade, Vol. 35, No. 6, December 2001, p. 1063. 48 ibid.

<sup>&</sup>lt;sup>49</sup> Sachin Chaturvedi and Gunjan Nagpal, "WTO and Product-related Environmental Standards: Emerging issues and policy options", Economic and Political Weekly, Vol. 38, No. 1, January 4, 2003, p. 67.

Korea, Norway and Switzerland. Due to adequate assistance provided by the government. to farmers in the form of subsidies, farmers remain insulated from international developments. International awareness becomes less in this situation.

### Subsidies undermine local markets in poor countries

Because agricultural subsidies, and especially export subsidies, result in dumping on the world market. This means that prices-both locally and globally-are driven down .and local poor farmers suffer twice, because they cannot export their crops to other markets, nor can they compete locally with low-cost product which is dumped in their national markets. This is the result of the strong support provided by the government to farmers in rich countries. The agricultural price situation in the world is influenced by the agricultural produce exported by rich countries. The huge amount of supply in the market, drives down agricultural prices. This results in the falling of prices, which hurts the farmers in the developed world, who get less remuneration for their produce.

## Subsidies drive farmers towards commodity crops rather than diversifying

As higher-value agricultural products are highly subsidized in wealthy countries, poor farmers have made the rational decision to produce commodity crops such as coffee and bananas, where they have some amount of competitive advantage over producers in wealthy countries. They have largely not been able to diversify into higher value agricultural goods that are now produced by farmers in wealthy countries.

## Subsidies affect the environment by encouraging overuse of land and other inputs

Subsidies create an incentive for producers to overproduce, to overuse agricultural inputs, and to convert marginal lands into production.<sup>51</sup> These factors cause environmental problems such as water pollution, erosion and conversion of wild land.

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<sup>&</sup>lt;sup>50</sup> ibid.

<sup>&</sup>lt;sup>51</sup> http://www.ong-omcmexico.org.mx.

# Subsidies hurt taxpayers and consumers

Consumers lose twice from agricultural subsidies. In the first instance, they are taxpayers who are taxed outright to fund the subsidies. Next, they are implicitly taxed through artificially higher prices on agricultural goods.<sup>52</sup> EU consumers pay up to twice as much for food items, as they would pay in a free trade regime. Present extra costs to consumers for agricultural goods in the EU can on an average be estimated to be in the interval of 80-100%. The OECD estimates that overall during 2001, OECD consumers were implicitly taxed at 24%.

## **Elimination of Agricultural Subsidies**

One of the important points of contention in trade talks ahead of the WTO, ministerial conference in Cancun, Mexico was the subsidies that the European Union and the US provide to their farmers.<sup>53</sup> The argument was that subsidies depressed prices worldwide and if these were eliminated, farmers in developing countries would benefit from higher prices. An example is the case of corn. At current conditions, producers in developing countries would experience a price increase of 2.9% only after twenty years. For other crops the increases would be of 1.6% in the price of rice, 0.8% for wheat, and and1.1% for other coarse grains.<sup>54</sup>

Governments in rich countries are paying over US\$ 300 billion each year to subsidize their agricultural sectors – six times the total amount of aid to developing countries.<sup>55</sup> This is sufficient to feed, clothe, educate and provide healthcare for every child on the planet. In a massive breach of faith, rather than complying with the spirit of agreements reached during the Uruguay round negotiations, and reducing levels of

<sup>&</sup>lt;sup>52</sup> ibid.

<sup>&</sup>lt;sup>53</sup> http://apacweb.ag.utk.edu.

<sup>&</sup>lt;sup>54</sup> ibid.

<sup>&</sup>lt;sup>55</sup> http://www.ukfg.org.uk.

agricultural subsidies, rich countries have actually increased them. At the same time, developing countries have been forced to reduce or eliminate their subsidies under pressure from international donors. Developed countries are practicing double standards-protection for the rich and free play for market forces for the poor.

Farm subsidies in the EU and US are increasing the gap between rich and poor.<sup>56</sup> Specifically they have:

a) Undermined the livelihood of poor and small-scale farmers

b) Encouraged over-production, distorted trade and depressed prices

c) Made US and EU farm goods artificially competitive on world markets

d) Resulted in the dumping of cheap subsidized produce in poor countries

e) Failed to prevent small UK farmers from going out of business

The EU's Common Agricultural Policy is currently under review and reforms will be in place by 2006.<sup>57</sup> The AoA is also being re-negotiated.

The clever use of subsidies by countries like the US has increased farm support. In the US, subsidy to a mere 900,000 farmers has increased by 700 times since 1996.<sup>58</sup> Two years before President Bill Clinton left office, the US had provided an additional US\$ 26 billion to its farmers. In absolute terms, the farm support in the OECD countries increased by 8% to reach the staggering figure of US\$ 363 billion in 1998.

WTO enables only 25 countries to provide export subsidies for their agricultural products and commodities.<sup>59</sup> Other countries, which do not have agricultural export subsidies such as India cannot make any new provisions for it. Export subsidies that need to be proved as per a formula are not provided in India. On the other hand, the US continues to find legitimacy for export credits, which are actually used to promote and

<sup>57</sup> ibid., p. 8.

<sup>&</sup>lt;sup>56</sup> Americo Beviglia Zampetti, "The Uruguay Round Agreement on Subsidies", *Journal of World Trade*, Vol. 29, No. 6, December 1995, p. 6.

<sup>&</sup>lt;sup>58</sup> http://www.genderandtrade.net.

push American agricultural exports. There are other such as Australia and New Zealand which are not willing to do away with commodity export boards. In any case, developed countries provide 90% of the global export subsidies.

Agriculture is at the heart of the Doha Round of multilateral trade negotiations that was launched by the WTO at its ministerial conference in November 2001.<sup>60</sup> But governments are far apart on their positions. Agriculture has been treated as an exception to the rules, as a special case outside the multilateral trade liberalizing process, since the GATT was agreed upon after World War II.<sup>61</sup> In successive GATT rounds, significant progress was made in liberalizing border protection and non-tariff measures within borders on industrial products.<sup>62</sup> But little progress was made to stem the increased support and protection afforded to agriculture in developed countries.

Agricultural policies are based on price support measures and subsidies of various kinds sustained by heavily restricting imports from lower cost producers abroad.<sup>63</sup> These policies result in massive distortions of production, consumption, and trade in the agricultural sector. Production and export subsidies in developed countries have depressed agricultural commodity prices in world markets and closed off trade opportunities, often for countries that are very poor. Recent studies put the resulting loss of rural income among developing countries as high as US\$ 60 billion annually.

In India, bringing the states in on India's WTO negotiating position would improve it. Currently, this position is mainly developed at the Ministry of Commerce,<sup>64</sup> without adequate consultations with the states. Some opening up of the process itself so as to ensure greater involvement of the state governments will be beneficial. The involvement of state governments, would be a recognition of the constitutional bases of India's federal system. Some policy domains negotiated in the WTO in fact, fall also

<sup>&</sup>lt;sup>59</sup> ibid.

<sup>60</sup> http://www.ceip.org/pubs.

<sup>&</sup>lt;sup>61</sup> Arijay Chaudhry, *GATT: A Developing Country Perspective*, (New Delhi: Asian Book Private Limited, 2002), p. 17.

<sup>&</sup>lt;sup>62</sup> ibid.

<sup>63</sup> Thamarajakshi, n. 24.

within the domain of the states.<sup>65</sup> Increased consultation is also driven by the political realities of India's coalition governments, which have included many regional parties that govern in the respective states.

<sup>64</sup> http://www.Gapresearch.org/governance.
 <sup>65</sup> ibid.

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### CHAPTER 4

#### **EU AND US POSITIONS ON DOMESTIC AGRICULTURAL SUBSIDIES**

The US and EU are at the centre of a raging debate over the future of world agricultural negotiations. These countries support their farmers by giving huge incentives, in the form of subsidies, which ensures that they have a strong edge over developing countries. The farmers in developing countries are at the receiving end of such practices practiced by US and EU. Though the farming communities in these countries are less in numerical, governments spend huge parts of their budgets to sustain these sectors. Billions of dollars go into farmer support programmes.<sup>1</sup>

## **Common Agricultural Policy (CAP)**

The EU places heavy emphasis on its agricultural sector and has courted controversy by refusing to cut support to its domestic sector. At the centre of EU's agricultural support is the Common Agricultural Policy (CAP).<sup>2</sup>

The CAP is the most complex example of common policy in the EU. Introduced between 1958 and 1968 and still in existence today, it has caused disputes and political tension within the EU and with rest of the world.<sup>3</sup> It is also a good example of the movement towards the integration of Europe. However, subsequent reforms have been slow in arriving and have not always achieved the success expected of them. The changing situations and contexts of the policy will be considered in terms of its effectiveness, as well as the reforms of the 1980s and 1990s.

<sup>&</sup>lt;sup>1</sup> Stefan Tangerman, "Agriculture: New wine in new bottlés?", in Klaus Gunter and Bernard Speyer (eds.), *The WTO Millenium round Free Trade in the 21<sup>st</sup> century* (London: Routledge, 2001), p. 199.

<sup>&</sup>lt;sup>2</sup> http://international.tamu.edu/eunotes/CAP.rtf.

<sup>&</sup>lt;sup>3</sup> Marco M Slotboom, "Subsidies in WTO Law and in EC Law: Broad and Narrow Definitions", *Journal of World Trade*, Vol. 36, No. 3, June 2002, p 520.

There were many motivational factors for the original formatting of the CAP. With the end of World War II of recent memory, there were still many effects being felt.<sup>4</sup> In terms of agriculture, this was seen in the protection of farmers and nation-specific rules and regulations related to production, imports and exports. There also remained some political mistrust between the central European countries, namely France and Germany. It was a combination of these factors that led to the formation of CAP. In 1958. a large proportion of the population of Europe was employed in agriculture, and the industry accounted for a significant percentage of GDP, indeed as high as 27% of the population of France and 5% of total GDP amongst the original members (Belgium, Luxembourg, Holland, France, Germany and Italy).<sup>5</sup>

The agricultural sectors of the members consisted primarily of small farms with the majority run by poor farmers.<sup>6</sup> There were, therefore, social incentives in addition to economic ones. Each member country had a series of safeguards in place to protect their own farmers. All of this were the effects of World War II and the rules of demand and supply. With the idea of a common market firmly rooted in the objectives of the proposed community, it was obvious that given the important position of agriculture at the time, there needed to be a community level policy to regulate the industry. For example, where all the member countries could enforce prices levies and safeguards for their own farmers, this could prove disadvantageous to other members. A commodity policy would not only be consistent with the common market, but should also benefit the farmers.

The intricate details of CAP are many and complicated. The principal objectives of CAP are:

i) Increase productivity

ii) Ensure fair standard of living for the agricultural community

iii) Stabilize markets

iv) Availability of supplies

⁴ ibid.

<sup>6</sup> ibid.

<sup>&</sup>lt;sup>5</sup> http://www.fao.org/regional/seur/public1/EuIntergr.htm.

v) Reasonable prices to consumers.<sup>7</sup>

The Council of Ministers, following the proposals of the Commission, then laid down three proposals for the implementation of these objectives:<sup>8</sup> i) Market unity based on common prices; ii) Community preference; and iii) Financial solidarity. From the very beginning it could be seen that the objectives, which remain fundamentally the same today, contradicted one another. Ensuring a fair standard of living, which would ultimately rest upon the price at which a farmer sells his produce, does not fit with reasonable prices for consumers.

Article 39(1) set out the objectives of the CAP:

i) To increase agricultural productivity by promoting technical progress and by ensuring the rational development of agricultural production and the optimum utilization of the factors of production, in particular labour

ii) To ensure a fair standard of living for the agricultural community, in particular by increasing the individual earnings of persons engaged in agriculture

iii) To assure the availability of supplies and

iv) To ensure that supplies reach consumers at reasonable prices.<sup>9</sup>

Article 39 (2) specifies that in working out the CAP and the specific methods for its application, account should be taken of:

(i) The particular nature of agricultural activity that results from the social structure of agriculture and from structural and natural disparities between the various agricultural regions;

(ii) The need to effect the appropriate adjustments by degrees, the fact that in the member states agriculture constitutes a sector closely linked with the economy as a whole.

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<sup>&</sup>lt;sup>7</sup> Tim Josling, "Can the CAP Survive Enlargement to the East?", in John Redmond and Glenda G. Rosenthal (eds.), *The Expanding European Union: Past, Present, Future* (Boulder: Lynne Riehner Publishers, 1998), p. 89. <sup>8</sup> ibid.

The processes of CAP are also complicated. It involves a system of set prices and levies determined by the Commission rather than by the world market.<sup>10</sup> The target price established for the farmers social needs is guaranteed and usually above the world market price. There are even intervention agencies that are requested to buy goods should there be risk of falling below the target price. The funding for the CAP is provided centrally under the European Agricultural Guidance and Guarantee Fund. This agency is responsible for the intervention as well as the payments made to the agricultural sector.

This policy has not been without its problems. One major issue has been that while it suited very well the situation as it obtained in 1985, when agricultural dependence was high. Things moved on and in particular, the state of the agricultural sector changed. The number of people employed in the sector declined across the community, as did the percentage of GDP generated by agriculture. For example, now only 11% of workers in France is employed in agriculture. However, there was not significant reform of the policy until the 1980s. Secondly, with the subsequent expansion of the community, new members brought with them new problems. The most documented example is that of UK. With a relatively small agricultural sector, only 3% employment, the UK felt it paid too much into the European pocket for agriculture.<sup>11</sup> The UK's contribution to CAP was at par with other countries. Margaret Thatcher even went so far as to negotiate a rebate to offset the cost she perceived to her country. There were also problems with the UK because of the large amount of food imported from other trading partners.

Supply and demand combined with the terms of the policy created huge difficulties. Since the price for goods was guaranteed, farmers had no incentive to limit production of goods to meet the demand. Therefore, the community countries were producing more than 100% of the required food and creating a surplus. Even with exports there was still too much. The economic consequence of these actions was that the CAP

<sup>9</sup> ibid.

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<sup>&</sup>lt;sup>10</sup> http://international.tamu.edu/eunotes/CAP.rtf.

was accounting for a huge and disproportionate 70% of the community budget before reforms were initiated.<sup>12</sup>

A constant factor however, has been the constant opposition to change in the existing policy. In Brussels, there are strong farmers lobby groups, which oppose any change to the existing policy. It has become common to the interests of many farmers that things remain as they are because many have become entirely dependent on the CAP for survival. There is also significant opposition from France and Germany, each for their own reasons. The first reform attempt was in 1979 regarding the over-production of milk. This was updated in 1984. 1988 saw the most important development up to that time with the Delors budget package, which had substantial implications for agriculture.<sup>13</sup> Here, spending was limited to no more than 74% of the increase in community wide GDP. Limits were also introduced for the level of over production to receive assistance. It was thought that this could help desist farmers from the huge levels of over production.

### The McSharry Reforms

The first reform to be forced by external as well as internal forces was the McSharry plans of 1992.<sup>14</sup> The document's essential features are:

i) emphasis on defence European model of small family farm agriculture.

ii) partial refusal of the logic of stabilizers and of production quotas and return to the Green Box approach: market orientation through price reductions compensated by payments decoupled and decrease according to farm size;

<sup>&</sup>lt;sup>11</sup> Sophie Meunier, "Divided but United: European Trade Policy Integration and EU and US Agricultural Negotiations in the Uruguay Round", in Carolyn Rhodes (ed.), *The European Union in the World Community* (Boulder: Lynne Rienner Publications, 1998), p. 193. <sup>12</sup> ibid.

<sup>&</sup>lt;sup>13</sup> ibid., p. 195.

<sup>&</sup>lt;sup>14</sup> Michele De Benedictis, et al, "Nature and Causes of CAP: Changes in the 1980s and a Tentative Exploration of Potential Scenarios", in Giovanni Anania, et al, *Agricultural Trade Conflicts and GATT:* New Dimensions in US-European Agricultural Trade Relations (San Francisco: Westview Press, 1994), p. -132.

iii) redefinition of the justification for supports and strong emphasis on their more equitable redistribution among farmers;

iv) strengthening of measures in areas regarding quality, the environment, and forestation, which are seen as new recipients of decoupled and selective support.

Not only was there still a disproportionate percentage of the community budget being put into agriculture, but also there was mounting tension between Europe and other trading nations, such as the USA. The 1992 Uruguay meeting of GATT was held up considerably because of this tension. The most radical reform in 1992 was the move from focus of assistance from prices to direct payments to farmers based on income. It was the intention that this would reduce costs as the over production would no longer be rewarded. In addition, if the price was no longer the focus, then Europe would no longer be undercutting the world market to such an extent, thus reducing at least some of the international tension. In addition to this advantage, the focus moved exclusively to poor farmers, intervention prices were cut and some compensation paid to farmers who improved the efficient capacity of their farms. Opposition came from farmers themselves who didn't like the implication of welfare, and who felt that this form of subsidy was unstable. It was these reforms that led to conclusion of the GATT talks and to the Blair House Agreement of 1992 reached by the USA and the EU.<sup>15</sup>

# The Enlarged EU

The strength of the EU has increased to 25 at present. This creates problems particularly in the area of agriculture, as many of the new members from Eastern Europe are agricultural economies. The new members have to adjust to the system of CAP. The terms of these agreements not only cut costs but also delegate some autonomy back to the member states. As much as 25% of the direct payments made to farmers could be administered by individual nations. In terms of the reduction in prices, the intervention price for cereals was to be cut by 20% in 2000 and the price of beef by 30% from 2000 to

15 ibid.

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2002. There were also reforms of quotas for products such as milk. There have been disputes involving some countries. France has been especially stringent in its complaints about decentralization, claiming it goes against the original agreements made as far as 1957.

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If CAP, is to be successful with the integration of new members, attitudes that date back to 1957 need to be overcome. During its inception, the CAP was a suitable measure to deal with the problems in agriculture and to develop a common policy. It was, however not intended that it account for such a large proportion of the budget. The situation of the EU today shows that the reforms of the CAP are necessary and indeed urgent given the rising costs.<sup>16</sup> Individual states can no longer hold on to outdated tradeoffs made with other members. This is relevant in the case of France and the UK where serious decisions need to be made as to whether or not to cooperate with Europe. The CAP needs to be developed in such a way as to support the new members when they are admitted.

Each candidate country, as apart of the requirements, has to make some changes to their agricultural industries. The level of agricultural employment is also much higher in these countries. It is claimed however, that it should be expected that the industry will modernize and therefore, the workforce will be reduced and redistributed to other industries. Various possibilities have been suggested for the new member countries. These range from complete application of the existing CAP to only partial measures at first. There are still problems that may arise. If the CAP is applied as it is, it will be costly in two ways. Firstly, it seems obvious that in countries where there is a large agricultural sector and GDP is low, there will be a significant number of farmers that will be receiving the subsidies offered by the CAP. If this is going to push up the spending then it may then be an option to raise the level at which farmers can receive help. It will prove to be costly because it will lose support from incumbent members such as Ireland who at present receive a large proportion of EU subsidies.<sup>17</sup>

<sup>&</sup>lt;sup>16</sup> ibid.

<sup>&</sup>lt;sup>17</sup> Timothy Josling, "Agriculture and the next WTO Round", in Jeffrey J Schott (ed.), *The WTO After Seattle* (Washington: Institute for International Economics, 2000), p. 92.

## **Internal Dimension of CAP Reforms**

## Financial

The main driving force towards CAP Reform is its financial exertion on control of agricultural expenditures and the distribution of costs and benefits between member states and categories of beneficiaries. The issue of CAP's financial dimension, was posed as far as the late 1970s and, more reforms included during 1980s. At the beginning of the 1990s it continued to be perceived as the only important problem. The effects of German reunification on CAP budget and the perspective of integration with the East European countries created more financial problems.<sup>18</sup>

## Decline of the political importance of agriculture

In the European integration process, the role of agriculture was not so vital. It was on the verge of decline. Politically, there is also full awareness of the CAP's economic and administrative inefficiency in attaining its objectives and of the disharmonies this has caused. Even among policy makers there is growing intolerance for costly, complicated policy that is difficult to administer, and is accused of satisfying no one. So the CAP has lost its historical role as integrating factor in the European integration process.

# Environmental Sustainability of the CAP

The capacity of the CAP to defend and promote agriculture producing good quality food with environmentally compatible techniques is a new objective/constraint.<sup>19</sup> In the context of over production, the traditional aim of food security, which the CAP pursued with success, is replaced by environmental security.

<sup>&</sup>lt;sup>18</sup> De Benedictis, n. 16, p. 127.

<sup>&</sup>lt;sup>19</sup> ibid., p. 128.

## **External Dimensions of CAP Reforms**

The international dimensions regarding all the aspects of growing interdependence between CAP and agricultural policies in the rest of the world and the need to reduce the CAP's distorting effects on international markets and to avoid trade conflicts.<sup>20</sup> This problem, given the CAP'S protectionist character has always existed. But the perception of it has grown as the EC gradually became a net exporter of a large number of agricultural goods. However, during the first half of the 1980s the problem was limited and manageable in a bilateral framework with some specific contentions with the US and a series of agreements with third world countries.

With regard to relations with developing countries, the EU tends to utilize its agricultural surpluses strategically in economic and political relations. On the one hand, it has conceded food aid and sales at favourable conditions to less developed country importers. On the other hand, it has tried to maintain good relations with exporting countries, guaranteeing them bigger quotas of EU imports through a series of bilateral agreements.

Such methods however, have further strained relations with the US and other developed countries that are exporters of agricultural goods. They accuse the EU of having contributed to destabilizing and depressing international prices by lowering import volumes and increasing subsidized exports to world markets. From 1986 onwards, strong emphasis was put on agricultural trade liberalization and the CAP found itself on the defensive.

## Table 4.1

<sup>20</sup> ibid., p. 129.

Usage of Domestic Support Categories, Export Subsidies and Export Credits, 1995-

| European       | 1995      | 1996      | 1997       | 1998    | 1999 |
|----------------|-----------|-----------|------------|---------|------|
| Communities    |           |           |            |         | _    |
| Total          | 116,537.7 | 114,606.1 | -          | -       | -    |
| Domestic       |           |           |            |         |      |
| Support        |           |           |            |         |      |
| Green Box      | 24,188.5  | 26,597.7  | -          | -       | -    |
| S and D Box    | Na        | Na        | -          | -       | -    |
| Blue Box       | 26,850.0  | 25,847.6  | -          | -       | -    |
| De minimis     | 1,063.1   | 914.5     | * <b>-</b> | -       | -    |
| Current Total  | 64,436.0  | 61,264.4  | -          | -       | -    |
| AMS            |           |           |            |         |      |
| Total Export   | 6,292.0   | 6,683.8   | 4,915.4    | 5,843.1 | -    |
| Subsidies      |           |           |            |         |      |
| Export Credits | -         |           | -          | -       | -    |
|                |           |           |            |         | 1    |

99 (in US\$ million)

Source: WTO, Committee on Agriculture Special Session, (Geneva: WTO, 15 June 2000).

# **US Domestic Agricultural Policy**

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The US extends huge support to its agricultural sector. The three main forms of support given by the US are: farm income support, environmental protection and control of federal expenditure.<sup>21</sup>

Farm income support is traditionally the most influential objective. Support is given to boost the farm income of the farmers. Since, very less percentage of the population is involved in agricultural sector, it is imperative for the government to extend support. The most influential farm income support programmes are commodity support

<sup>&</sup>lt;sup>21</sup> Bruce L Gardner, "US Domestic Policy and US-E U Trade", in Giovanni Anania, et al. Agricultural Trade Conflicts and GATT: New Dimensions in US-European Agricultural Relations (San Francisco: Westview Press), p. 71.

programme.<sup>22</sup> Commodity support programmes are given to commodities like food grains. This measure increases the U S agricultural output and exports. Support is provided to commodities like wheat and corn. The U S is one of the world's largest producers of these two commodities. This measure has resulted in overproduction. Excess supply is channeled to exports, which go mostly to developing countries. This has resulted in a oversupply in the market. This supply pushes down prices in markets for agricultural commodities. This is the main complaint, of the developing countries. Lower prices affect the export commodities of the developing countries.

Environmental protection also, is one of the important provisions of US domestic agricultural policy. Environmental protection was advocated, to protect and preserve scarce natural resources. Protection measures, like soil conservation, discourage overuse of land for cultivation. This is done through acreage-idling programmes. There are also acreage controls with limitation on the quantity of crops cultivated in an acre.<sup>23</sup>

## Important Legislation Governing Agriculture in the US

# Federal Agriculture Improvement and Reform Act, 1996

The Federal Agriculture Improvement and Reform Act of 1996, provides the basic legislation governing farm policy for the period 1996-2002.<sup>24</sup> The main policy instruments for the crop sector are the predetermined annual Production Flexibility Contract payments based on historical enrolled area of contract crops like, Wheat, Maize, Barley, Oats, Rice and Cotton. The price of sugar is supported by a tariff-rate quota. Milk and Dairy products are supported by minimum prices and government purchases of dairy products, as well as by tariffs, tariff-rate quotas and export subsidies. Other livestock industries are supported through border measures, including tariff-rate quotas for beef and sheep meat, and occasionally export subsidies for poultry and eggs. Input subsidies,

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<sup>&</sup>lt;sup>22</sup> ibid.

<sup>&</sup>lt;sup>23</sup> ibid., p. 85.

<sup>&</sup>lt;sup>24</sup> OECD, Agricultural Policies in OECD Countries (Paris: OECD, 2001), p. 132.

including interest concessions, fuel tax reductions and subsidies for grazing and irrigation are also provided. Environmental programmes form an increasingly important area of agricultural policy, focusing on measures to convert erosion-prone cropland to approved conservation uses, to re-convert farmland back into wetlands, and to encourage crop and livestock producers to adopt practices that reduce environmental problems, on a costsharing basis. Research and advice are increasingly focused on promoting sustainable farming practices.

# The Farm Security and Rural Investment Act, 2002-2007

A new six year farm bill, known as the Farm Security and Rural Investment Act (FSRI) 2002-2007, was signed on 13 May 2002, to replace the Fair Act of 1996.<sup>25</sup> This Act includes programmes for commodities, conservation, trade, nutrition, credit, rural development, research, forestry initiative and energy. These programmes, with the exception of forestry, all contain incentives which will influence the future of US agriculture. The most important provisions pertaining to agriculture are commodity programmes, conservation and trade. While the new legislation increases overall support to US farmers, it includes a provision preserving compliance with the limits on domestic support as measured by the aggregate measure of support under the Uruguay round of AoA. The US ceiling on AMS support currently stands at US \$19 billion, and if the Secretary of Agriculture determines that this ceiling will be exceeded, expenditures shall be adjusted to avoid exceeding allowable limits.

# New spending under the FSRI Act

The new legislation provides for additional spending authority over a 10-year period of US \$ 73.5 billion. Most of this is additional money available for commodity programs. Additional budget authority for conservation is 23% of the total and that for trade measures 1.5%. The new legislation continues the marketing loan programme with loan rates fixed at specified levels for 2002-2007.Fixed payments will continue to be

<sup>&</sup>lt;sup>25</sup> OECD, OECD Agricultural Outlook 2002-2007 (Paris: OECD, 2002), p. 122.

provided as under Fair act, but at somewhat higher payment rates when compared to the Fair act level in 2002 and extended to soyabeans and minor crops.

# **Impact of the Farm Bill**

The FSRI Act will have some effect on a number of variables that are relevant in the present situation.<sup>26</sup> These include the level of output in US Agriculture and international market prices. These effects would result from various factors, including changes in loan rates and in direct payment rates, potential changes in the degree of decoupling of direct payments and effects the new measures may have on future variability of farm revenues.

#### Table 4.2

# Usage of Domestic Support Categories, Export Subsidies and Export Credits, 1995-99 (US\$ million)

| United States  | 1995     | 1996     | 1997     | 1998  | 1999 |
|----------------|----------|----------|----------|-------|------|
| Total          | 60,926.1 | 58,875.9 | 58,295.7 | •     | -    |
| Domestic       |          |          |          |       |      |
| Support        |          |          |          |       |      |
| Green Box      | 46,041.0 | 51,825.0 | 51,246.0 | · -   | -    |
| S and D Box    | na       | Na       | na       | -     | -    |
| Blue Box       | 7,030.4  | . 0      | Ū        | -     |      |
| De Minimis     | 1640.8   | 1,153.2  | 811.6    | 1 _   | · -  |
| Current Total  | 6,213.9  | 5,897.7  | 6,238.1  | •     | -    |
| AMS            |          |          |          |       |      |
| Total Export   | 25.6     | 121.5    | 112.2    | 146.7 | -    |
| Subsidies      |          |          |          |       |      |
| Export Credits | -        | -        | -        | -     |      |

Source: WTO, Committee on Agriculture: Special Session, (Geneva: WTO, 15 June 2000).

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<sup>&</sup>lt;sup>26</sup> ibid.

# Domestic Subsidies in the EU and US

Economic modeling suggests that subsidy payments increase production, drive down prices and lead to dumping.<sup>27</sup> Production and trade distorting subsidies should be phased out and supply management – which properly controls agricultural production – should be introduced. There should be a serious review of the current evidence on the impact of different kinds of support on output, prices and trade. Developed countries should overhaul and then implement the WTO's Marrakech Decision to create a revolving compensatory fund.

There is no simple correlation between subsidies, levels of production and impacts on prices. Production in some heavily subsidised sectors – such as sugar and dairy in the EU – is also 'constrained' by quotas or other supply management policies. These same sectors are also protected behind high tariffs, thereby constraining the production and exports from elsewhere. However, several models have been run to determine the extent to which production and prices would change if the EU's or US's agricultural policy was eliminated or subsidies phased out.

Up to the late 1990s, EU non-grains output (such as sugar) as a result of the CAP was eight times higher than it would otherwise have been. Grains and milk production was 50% higher, livestock 30% higher and meat products some 18% higher.<sup>28</sup> Production in the EU is therefore significantly higher than it would have been in the absence of subsidies (as well as border protection). Another major development is that the CAP has displaced production in other parts of the world. For example, the CAP displaced between 12-13% of non-grains and grains output in North America, between 5-15% of non-grain, meat and livestock output in Latin America and between 4-7% of non-grain. livestock and milk output in high-income East Asia.

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<sup>&</sup>lt;sup>27</sup> http://www.Cairnsgroupfarmers.org/mr/Seattle 99.htm.

<sup>&</sup>lt;sup>28</sup> ibid.

Detailed studies conducted for different sectors estimate that if all current forms of price support for the sugar sector across the OECD countries were removed, this would raise world sugar prices by between 30-38%.

A substantial proportion of global producer support to sugar falls within the EU and the US – some 41% and 17% respectively. <sup>29</sup>

Others studies have measured the impact of domestic subsidies alone. If domestic support in developed countries was removed, this would increase world prices for wheat and other grains by 12% with major price increases also for oils and oil seeds and livestock. There is a similar situation for cotton. The International Cotton Advisory Committee found that if cotton subsidies were withdrawn in the US, domestic production would fall by about 10% but world prices would increase by nearly 26%.

Whatever the merits or demerits, of this type of modeling, they reveal a consistent trend. That in the absence of OECD country subsidies (and in some cases tariffs), particularly in the US and the EU, world production of many products would be lower and world prices higher. It is therefore possible to conclude that the current subsidy regimes in both the EU and US have increased production and depressed prices and that the removal of production and trade distorting subsidies in the North would be beneficial to developing countries. To cushion the impact of higher prices and increased import bills for least developed and net food importing developing countries, it is essential that developed countries should overhaul and then implement the WTO's Marrakech Decision with regards the creation of an ex-ante revolving compensatory fund.<sup>30</sup>

The 2002 US farm legislation has increased domestic subsidies still further to the extent that they may exceed the final AMS bound commitment to keep spending in the

 <sup>&</sup>lt;sup>29</sup> Americo Beviglia Zampetti, "The Uruguay Round Agreement on Subsidies: A Forward-Looking Assessment", *Journal of World Trade*, Vol. 29, No. 6, December 1999, p. 7.
 <sup>30</sup> OECD, n. 27.

amber box below \$19.1 billion.<sup>31</sup> This is because such assistance is tied to price levels and currently domestic prices are low. The Bill will increase commodity spending (conservation programmes will also go up) to about \$17 billion per annum over a tenyear period although a large part of this is unpredictable because it is linked to market price movements and the weather.

Under the EU agricultural reform package of 2003, spending on commodity programmes is capped but will increase until 2013 when it will reach about  $\in$ 49 billion per annum.

Recent reforms to the CAP and US support systems have merely involved juggling the way in which subsidies are classified, not cutting the total spend. Massive amounts of subsidies remain available to both EU and US producers. Because they distort production and trade, amber and blue box subsidies should be phased out. Developing countries should be provided with financial (or other) assistance – with their full consultation – due to the erosion of preferences.

Instead of cutting subsidies, both the EU and US reforms are merely shifting subsidies into categories of subsidies ('boxes') that are not subject to WTO reduction commitments, such as blue box subsidies which are only permitted under schemes which attempt to limit production (such as set-aside in the EU) and green box subsidies which are deemed not to distort trade or at most cause minimal distortion.<sup>32</sup> The EU has progressively been shifting amber box (AMS) subsidies into the blue box. In the 1995/96 WTO reporting of domestic support, the EU's AMS stood at 47.5 billion euros, blue box payments at 20.8 billion euros and green box payments at 18.7 billion euros. Latest estimates put the EU figures at 28.6 billion euros for AMS and 29.4 billion euros for the blue box.<sup>33</sup>

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<sup>&</sup>lt;sup>31</sup> ibid., p. 31.

<sup>&</sup>lt;sup>32</sup> http://www.Europa.eu.int/comm./agriculture/external/wto/document/mod.eu.pdf.

<sup>&</sup>lt;sup>33</sup> ibid.

After the CAP final agreement of 2003, the EU will further shift subsidies from the blue box to the green box (one estimate is that the EU will be able to shift about 75% of subsidies from the blue to green box as a result of this agreement.

The EU has officially begun debate, which will likely last into 1999, on reform of the common agricultural policy (CAP). These changes are necessary given current and future WTO commitments and enlargement of the EU into Eastern Europe.

The US and the EU had two way agricultural trade of over \$18 billion in 1997. The EU, as a group of 15 countries, is the United States' second largest export market for food, fishery and forestry products, importing \$10.7 billion in 1997.<sup>34</sup> The United States and the EU compete head-to-head in almost all third countries for export sales of agricultural commodities. While there are always a number of contentious trade disputes between the US and the EU, a vast majority of our agricultural trade occurs with few problems.

Many representatives of the stressed that the EU should be allowed time to make policy changes given their agricultural model plans and due to consumer concerns about food safety.

The US and the EU have however, begun to make some progress of late. on a number of difficult bilateral trade disputes.<sup>35</sup> The EU moved closer to reopening the market for US corn with the approval of three new GMO corn varieties. The EU is expected to renew an import quota for traditional imports of American malting barley. On rice, the EU opened import quotas that were negotiated when Austria, Finland and Sweden joined the EU in 1996. While all of these issues will require further bilateral consultations, they are moving forward.

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 <sup>&</sup>lt;sup>34</sup> Kevin C Kennedy, "Reforming Farm Trade in the Next Round of WTO Multilateral Trade Negotiations", *Journal of World Trade*, Vol. 35, No. 6, December 2001, p. 1063.
 <sup>35</sup> ibid., p. 1065.

Even though the EU's import ban on beef produced with growth promoters was found to scientifically unjustified and inconsistent with WTO commitments, the EU has refused to remove it prior to conducting another risk assessment. On the US-EU veterinary agreement, a number of difficult hurdles have still to be cleared before it can be signed and implemented.

The EU continues to debate specified risk materials in food, feed and industrial products and restoration of consumer confidence after the BSE crisis. The EU's review of GMO's is still lengthy, unpredictable, and non-transparent. Meanwhile, conflicts between the two major economic powers continue over a variety of issues.

# **CHAPTER 5**

#### CONCLUSION

The economy in India continues to be highly agriculture-centric even today. The GDP contribution by the agriculture sector is so crucial, that it is the backbone of the Indian economy. Therefore, India's stance in the WTO on agricultural issues is very crucial.

As their major source of employment, the agriculture sector cannot be taken lightly by developing countries. In the developed countries, the population dependent on agriculture is below ten percent. Nevertheless, they are the major exporters of agricultural products, helped mainly by the assistance provided by their respective governments. They control the prices of agricultural products and the huge amount of subsidies they extend to their agricultural sector completely distorts trade in the world. Developed countries thus make use of the huge financial resources at their disposal to support their agricultural sector. This support is extended in the form Product specific and Non-Product specific subsidies whereas in India, mostly input subsidies are given, mostly for inputs like fertilizers, electricity and irrigation.

Subsidies in India have been in existence from the very beginning of the planning era. Through all of India's Five-Year Plans, the cost of subsidies to the government has been on the rise. This is a clear indication that subsidies are not a new entrant to the Indian agricultural scene. The role played by subsidies in a developing country like India is quite crucial. Since not very advanced farm practices are followed in this country, the introduction of the domestic subsidy regime has been necessitated. Besides the size of the population dependent on agriculture being very high, the percentage of marginal farmers is high, compared to farmers with large land holdings. Rural poverty is another factor in the issuance of subsidies to the agriculture sector. Since the launching of economic reforms in 1991, subsidies in particular, subsidies to agriculture have become a matter of acrimonious debate. The impression created has been that Indian agriculture is highly subsidized through cheap fertilizers, free power and irrigation water in various states and that the system can no longer carry on this burden.

The AoA brought agriculture, effectively under the multilateral trading system for the first time. Prior to the Uruguay round, trade in agriculture was. highly distorted. Market access for agriculture products was limited as physical import barriers restricted many markets. The presence of massive domestic subsidies led to over production of temperate crops in the developed countries that combined with stagnating demand led to excess supply. Export subsidies were then used to dump the surplus agricultural output on the international market. The AoA marked a significant departure from, the trend in the sense that it attempted to improve discipline in the global agricultural trade by removing trade distortions resulting from unrestricted use of production and export subsidies and import barriers, both tariff and non-tariff. However, after five years, the evidence shows that the actual impact of AoA on agricultural policies has been far less than expected. This has been due mainly to implementation problems.

The WTO represents diverse interests, from the developed, developing and least developed countries. Often, its meetings turn into battlegrounds where various countries fight it out on various issues. The reasons behind the support of developed countries to their agricultural sector despite the fact that their agriculture sector forms only a minor percentage of the population has to do with historical reasons left over from the World War II. Food security remains uppermost in the minds of the political establishment.

Following increasing migration to the urban areas, the rural sector soon witnessed a reduction in the number of farmers engaged in agriculture. This alarming decrease in the numbers of farmers awakened the political establishment and governments started pumping heavy investments into the agriculture sector to keep the rural population engaged in the agriculture and to continue to practice farming. Huge incentives were

given to the farmers who started producing food in such large quantities that soon surplus were generated. To dispose off the surplus, they were given export incentives in the form of subsidies. This proved useful to the farmers in selling their produce in the international market. Farmers thus started realizing huge remuneration from export subsidies. Soon farming became a lucrative occupation. The migration therefore to the urban areas was stemmed. Thus subsidies grew from a crisis situation in developed countries following the start of industrial prosperity. This issue has now become a burning topic in the WTO negotiating process.

The Common Agricultural Policy is the most important policy support instrument for the agriculture sector in EU. The CAP that was introduced during 1958-1968, has raised controversies, disputes and political tensions within EU as well as with the rest of the world. The principal objectives of CAP were to increase productivity, ensure fair standard of living for the agricultural community, stabilize markets, availability of supplies, reasonable prices to consumers. Agricultural productivity needed to be increased and therefore it was felt that a common policy was necessary for all the countries in the Union.

The US supports agriculture, through the Fair Act, which provides support to the commodity programmes in the country. It has been extending billions of dollars worth of support to its agriculture sector leading to large distortions in trade.

The overall picture points to a situation of negotiations, where the developing countries like India, should strongly voice their demands effectively. In this context, analysts have pointed to some ways for developing countries to negotiate their demands.

Offensive strategies for developing countries include increasing domestic support. Far more radical cuts in domestic support are needed. Support in OECD countries is not going down and the American FSRI Act and the EU's CAP Final Agreement will have little impact on high levels of production, trade distortion and dumping. Similarly, the AoA must get tough on all forms of export subsidies. Other forms of export competition

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also need to be adequately covered. The peace clause should be rejected by the developing countries as it exempts agriculture from WTO disciplines on subsidies. Among defensive strategies for developing countries, developing countries should have the right to name their strategic products and protect them under exemptions from WTO disciplines on tariffs.

Developing countries need to increase their co-operation through forums like the WTO, to address the issues that are affect them vitally in the agriculture sector.

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### SELECT BIBLIOGRAPHY

## **Primary Sources**

Government of India, Committee on Trade Laws and WTO (New Delhi: Ministry of Commerce and Industry, 2001).

Government of India, Economic Survey 2001-2002 (New Delhi, 2003).

Government of India, Eighth Five Year Plan (New Delhi: Planning Commission, 1992).

Government of India, Ninth Five Year Plan (New Delhi: Planning Commission, 1997).

WTO, Committee on Agriculture: Domestic Support (Geneva: WTO, 2000).

WTO, Committee on Agriculture: Special Session (Geneva: WTO, 2000).

#### **Secondary Sources**

## Books

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- Acharya, S S and D P Chaudhri, *Indian Agricultural Policy at the Crossroad* (Jaipur: Rawat Publications, 2001).
- Adhikari, Ramesh and Prem-Chandra Athukorala (eds.), Developing Countries in the World Trading System: The Uruguay Round and Beyond (Cheltonham: Edward Elgar Publishing Limited, 2002).
- Alagh, Y K, *Globalization and Agricultural Crisis in India* (New Delhi: Deep and Deep Publications, 2003).
- Anania, Giovani, Colin A Carter, Alex F McCallan (eds.), Agricultural Trade Conflicts: New Dimensions in US-European Agricultural Trade Relations (San Francisco: Westview Press, 1994).
- Bagchi, Jayant, Agriculture and WTO: Opportunity for India (New Delhi: Samskriti Publishers, 2003).

Bagchi, Jayant, WTO: An Indian Perspective, (Calcutta: Eastern Law House, 2000).

Basavarja, M G (ed.), WTO: Regional Trading Arrangements and India, (New Delhi: Serial Publications, 2003).

- Bilal, Sanoussi and Pezoros Palvos (eds.), Negotiating the Future of Agricultural Policies: Agricultural Trade and the Millennium WTO Round (The Hague: Kluwer Law International, 2000).
- Chadha, G K, WTO and the Indian Economy (New Delhi: Deep and Deep Publications. 2001).
- Chand Ramesh, *Trade Liberalization, WTO and the Indian Agriculture* (New Delhi: Mittal Publications, 2003).
- Chaudhary, Arijay, *GATT: A Developing Country Perspective* (New Delhi: Asian Book Private Limited, 2002).
- Coldin, Ian and Alan Winters (eds.), Open Economies: Structural Adjustment and Agriculture (Cambridge: Cambridge University Press, 1992).
- Croome, John, Guide to the Uruguay Round Agreements (The Hague: Kluwer Law International, 1999).
- Dasgupta, Amit and Bibek Debroy, Salvaging the WTO's Future: Doha and Beyond, (New Delhi: Konark Publishers Private Limited, 2002).
- Debroy, Bibek, Amir Ullah Khan (eds.), Enabling Agricultural Markets for the Small Indian Farmers (New Delhi: Bookwell Publishers, 2003).
- Desai, Y B, (ed.), *Thoughts on the New Global Economy* (New Delhi: Tata McGraw Hill Publishing Company, 2001).
- Deutsch, Gunter Klaus and Bernard Speyer (eds.), *The WTO Millennium Round: Free* Trade in the 21<sup>st</sup> Century (London: Routledge, 2001).
- Dhindsa, K S and Anju Sharma, *Dynamics of Agricultural Development* (New Delhi: Concept Publishing Company, 2001).
- Gedam, Ratnakar, *Economic Reforms in India: Experience and Lessons* (New Delhi: Deep and Deep Publications, 1996).
- Gulati, Ashok and Jim Kelly, *Trade Liberalization and Indian Agriculture* (New Delhi: Oxford University Press, 1999).
- Gulati, Ashok and Sudha Narayanan, *The Subsidy Syndrome in Indian Agriculture* (New Delhi: Oxford University Press, 2003).
- Gupta, K R, (ed.), *WTO Text Volume I* (New Delhi: Atlantic Publishers and Distributors, 2000).

- Gupta, Rajesh Kumar, Agricultural Subsidies and Their Economic Implications (New Delhi: Deep and Deep Publications, 2002).
- Hoda, Anwarul (ed.), WTO and the Indian Agriculture (New Delhi: Social Science Press, 2002).
- Hoekman, Bernard M, Michel M Kostecki, The Political Economy of the World Trading System (Oxford: Oxford University Press, 2001).
- Hoekman, Bernard M, Will Martin (eds.), *Developing Countries and the WTO* (Oxford: Blackwell Publishers, 2001).
- Jackson, H John, The Jurisprudence of GATT and the WTO: Insight on Treaty Law and Economic Relations (Cambridge: Cambridge University Press, 2000).
- Kalirajan, K P, G Mythili, and V Shankar (eds), *Accelerating Growth Through Globalization of Indian Agriculture* (New Delhi: Macmillan, 2001).
- Krueger, O Anne (ed.), The WTO as an International Organization (New Delhi: Oxford University Press, 2001).
- Mathur, Vibha, Indian Economy and the WTO: New Challenges and Strategies (New Delhi: New Century Publications, 2002).
- McMohan, A Joseph, Agricultural Trade, Protectionism and the Problems of Development (London: Leicester: University Press, 1992).
- Nadakarni, M V, A S Seetharamu, and Abdul Amir (eds.). India: The Emerging Challenges, (New Delhi: Sage Publications India Pvt. Ltd., 1991).
- Narasaih, M L, WTO and The Developing Countries, (Delhi: Discovery Publishing House, 2001).
- Rao, M B, WTO and International Trade, (New Delhi: Vikas Publishing House, 2001.
- Rao, Panduranga D (ed.), WTO and Competitiveness (New Delhi: Excel Books, 2001).
- Rao, Sambasiva B (ed.), Agriculture in Indian Policy and Performance (New Delhi: Serials Publications, 2003).
- Ratnesh, Kumar, WTO: Structure, Functions, Tasks, Challenges (New Delhi: Deep and Deep Publications, 2001).
- Reddy, D Narasimha, Surjit Singh, and Dolly Arora, Political Economy of WTO Regime (New Delhi: Rainbow: Publishers, 2002).

ł

- Santhanam, M K, 50 Years of Indian Republic (New Delhi: Ministry of Information and Broadcasting/Government of India, 2000).
- Schott, Jeffrey J (ed.), *The WTO After Seattle* (Washington: Institute for International Economics, 2000).
- Shand, Ric (ed.), *Economic Liberalization in South Asia*, (New Delhi: Macmillan India Limited, 1999).
- Sharma, Devinder, GATT and India: The Politics of Agriculture (New Delhi: Konark Publishers, 1994).
- Sinha, R K (ed.), India's Economic Reforms and Beyond, (New Delhi: Anamika Publishers and Distributors, 1995).
- Vasisht, A K, and Alka Singh, WTO and New International Trade Regime: Implications for Indian Agriculture (New Delhi: Agricultural Economics Research Association, 2003).
- Vasudeva, P K, India and WTO: Planning and Development (New Delhi: A P H Publishing Corporation, 2000).
- Vyas, V S, India's Agrarian Structure Economic Policies and Sustainable Development, (New Delhi: Academic Foundation, 2003).
- Wardha, Haran, WTO and Third World Trade Challenges (New Delhi: Commonwealth Publishers, 2002).
- Wohlmeyer, Heinrich and Theodor Quandler (eds.), The WTO, Agriculture and Sustainable Development (Sheffield: Greenleaf Publishers, 2002).

# **Articles**

- Adhikari, Ratnakar, "Agreement on Indian Agriculture and Food Security: South Asian Perspective", The South Asia Economic Journal, Vol. 1, No. 2. September 2000. pp. 45-53.
- Bagchi, Sanjoy, "Seattle to Qatar: World Trade Negotiations", *Economic and Political Weekly*, Vol. 36, No.43, October 27, 2001, pp. 4045-47.
- Bhattacharya, B, "Implications of the WTO", Focus, Vol. II, No. 5, January-February 2001, pp. 7-12.

- Chambovey, Didier, "How the Expiry of the Peace Clause (Article 13 of the WTO Agreement on Agriculture) Might Alter Disciplines on Agricultural Subsidies in the WTO Framework", *Journal of World Trade*, Vol. 36, No. 2, April 2003, pp. 305-53.
- Chaturvedi, Sachin and Gunjan Nagpal, "WTO and Product-related Environmental Standards: Emerging issues and policy options", *Economic and Political Weekly*. Vol. 38, No. 1, January 4, 2003, pp. 66-74.
- Damodaran, A, "WTO Agriculture Agreement, Common Property Resources and Income Diversification Strategy", *Economic and Political Weekly*, Vol. 36, No. 38, September 22, 2001, pp.
- Delcross, Fabian, "The Legal Status of Agriculture in the World Trade Organization: State of Play at the Start of Negotiations", *Journal of World Trade*, Vol. 36, No. 2, April 2003, pp. 219-51.
- Gylfason, Thorvaldur, Prospectus for Liberalisation of Trade in Agriculture, Journal of World Trade, Vol. 32, No.1, February 1998, pp. 29-40.
- Kennedy, Kevin C, "Reforming Farm Trade in the Next Round of WTO Multilateral Trade Negotiations", *Journal of World Trade*, Vol. 35, No. 6, December 2001, pp. 1061-79.
- Kerr, William A, "The Next Step will be Harder: Issues for the New Round of Agricultural Negotiations at the World Trade Organization", Journal of World Trade, Vol. 34, No. 1, February 2000, pp. 123-39.
- Kumar, Nagesh, "Emerging WTO Issues and Challenges: Imperatives for South Asia", The South Asia Economic Journal, Vol. 1, No. 1, March 2000, pp. 5-12.
- Michalopoulos Constantine, "Developing Country Strategies for the Millennium Round", Journal of World Trade, Vol. 33, No. 5, October 1999, pp. 1-29.
- Panagariya, Arvind, "India at Doha: Retrospect and Prospect", Economic and Political Weekly, Vol. 37, No. 4, January 26, 2002, pp.279-84.
- Pandey, Posh Raj, "Agreement on Agriculture: Issues of Market Access for South Asian Countries", *The South Asia Economic Journal*, Vol.4, No.1, Jan-June 2003, pp. 19-23.

5

ì

- Rao, C H Hanumantha, "WTO and Viability of Indian Agriculture", *Economic and Political Weekly*, Vol. 36, No. 36, September 8, 2001, pp.
- Rude, James, "Under the Green Box: The WTO and Farm Subsidies", Journal of World Trade, Vol. 35, No. 5, October 2001, pp. 1015-33.
- Slotboom, Marco M "Subsidies in WTO Law and in EC Law: Broad and Narrow Definitions", *Journal of World Trade*, Vol. 36, No. 3, June 2002, pp. 517-41.
- Thamarajakshi, R, "Doha Declaration and Agriculture in Developing Countries", *Economic and Political Weekly*, Vol. 37, No. 1, January 5, 2002, pp. 23-27.
- Vaidyanathan, A, "India's Agricultural Development Policy", Economic and Political Weekly, Vol. 35, No. 20, May 13, 2000, pp. 1735-41.
- Waer, Paul and Edwin Vermulst, "EC Anti-Subsidy Law and Practice After the Uruguay Round: A Wolf in Sheep's Clothing?, *Journal of World Trade*, Vol. 33, No. 3, June 1999, pp. 19-43.
- Zampetti, Americo Beviglia, "The Uruguay Round Agreement on Subsidies: A Forward-Looking Assessment", *Journal of World Trade*, Vol. 29, No. 6, December 1999, pp. 5-29.

## Web sites

http://apacweb.ag.utk.edu.

http://international.tamu.edu/eunotes/CAP.rtf.

http://www.Cairnsgroupfarmers.org/mr/Seattle 99.htm.

http://www.ceip.org/pubs.

http://www.Europa.eu.int/

http://www.fao.org/

http://www.Gapresearch.org/governance.

http://www.genderandtrade.net.

http://www.kisanwatch.organization/eng

http://www.organization-omcmexico.organization.mx.

http://www.ukfg.org.uk.



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