

Chapter No.1

Research Methodology

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1.1) Introduction:

Agriculture is the first culture of mankind. There is no culture and no life without agriculture as we require food to at least 2-3 times in a day. But agriculture still needs to be developed. Because the 21st century agriculture will be different from the past and present day agriculture. In current globalized economy, agriculture can't be away from competition and it should not remain a main subsistence activity. Agriculture has to make use of scientific development in the method of cultivating the seed, fertilizer, pesticides, harvesting and further processing etc. So that India will become self sufficient in the matter of food security overcoming the age old problems of hunger malnutrition and poverty.

Agriculture plays a crucial role in rural development by lacking the problems of malnutrition, unemployment and poverty. In this context agriculture is sine qua non national as nearly 80 percent of population lives in rural areas and depends upon agriculture sector which accounts for nearly 40 percent of gross domestic product Gross Domestic Production (GDP) and 30 percent of country's export in India.

World trade system had become highly restrictive during the depression of 1929 and more so during the Second World War. It was widely realized that along with the post war reconstruction, the world trading system should also be radically reformat. It was because of this reason that the General Agreement on Trade & Tariffs (GATT) was simultaneously established along with the setting up of the World Bank & the International Monetary Fund (IMF) immediately after the Second World War in 1947.¹

The matter of Agriculture trade also, Article XI of General Agreement on Trade & Tariffs (GATT), 1947 has prohibited quantitative restriction on import & export other than duties, taxes and other charges whether through quotas, import or export licenses or other measures. This is notwithstanding with the negotiations. One of the major reasons was that it allowed various exceptions to the rules on non tariff measures and subsidies in Agriculture.

Under export subsidization, ill types of subsidies or payment by Government or their agents for promoting the growth of export, including transport or credit subsidy at concessional rates, were subject to reduction commitment. But under the special & differential treatment provisions, exports in developing countries could avail transport subsidy and other support for promoting export. Regarding reduction commitment, while developed countries had to reduce export subsidy by 36 percent

during six years (1995-2000), the developing countries had to reduce it by 24 percent over ten year period. There were commitments regarding reduction of export quantities.²

In addition to this there was an obligation also maintain current and minimum access to tariff opportunities and to establish a minimum access tariff quota of a minimum of 3 percent of domestic consumption in the base period 1986-88. This was to be gradually increased to 5 percent of base period consumption over the implementation period.

The matter of market access, the choice of the base year period of 1986-1988, when prices were extremely low, enabled the developed countries to get away with much higher than the true tariff equivalent for the years immediately preceding the conclusion of the round (1989-1993).

The major players indulged in dirty tariffication that enabled them to come to a higher figure of base tariff equivalents by as much as 61 percent for the European Economic Commission (EEC) and 44 percent by the United State America (USA). Because of dirty tariffication, developed countries have been able to reduction very stiff tariffs for several highly protected and high value Agriculture commodities such as dairy and sugar products on the other hand, oil seeds, fruits and vegetables, which were less protected, were further liberalized. This policy has proved deleterious to the interested of developing countries like India. Developing countries have also declared ceiling bound rates at very high levels of 100, 150 or 200 percent, which were unrelated to the applied levels of protection.³

Serious problems have arisen regarding provisions on export computation also. The most important problem is of course, the very large subsidies given by developed countries to certain products which make the exports of many commodities from developing countries non competitive furthermore, the export subsidy commitments have been made on the basic of groups of products. This gives members flexibility for increasing subsidy on a product within a group of products while reducing it on a minor product. Finally despite the fact that export credit by developed countries is not allowed, developed countries continue to give large export credit at concessional rates.

It has to be underlined that Globalization offers both opportunities and challenges. The opportunities consist of availing of the benefits of world trade and

growth. The challenges lie in enabling the sharing of these benefits not by a small minority of working people in rural and urban India.

1.2) Significance of the study:

The Agreement on Agriculture (AOA) was made an integral part of the World Trade Organization (WTO) to get introduced the much needed discipline in the market for agricultural commodities, which were highly distorted because of the large volumes of subsidies that countries were using to support their producer. In such a situation the inefficient producer, particularly from the major industrialized countries, were allowed to control the global markets while relatively efficient producer in the developing countries were discriminated.

1.3) Statement of the problem:

The present study tries to the statement of the problem is 'A study of Agriculture in Maharashtra : ^{1994-2006,} ~~during~~ Globalization' explain the agriculture in Maharashtra ^{1994-2006,} ~~during~~ globalization, the globalization of new economic policies has a long run impact on the India's as well as Maharashtra's agricultural development. For example, change in export, agricultural policies and programme strategies, etc.

Because of the dirty tariffication, developed countries have been able to employ very stiff tariff for several highly protected and high value agricultural commodities like dairy and sugar products. Hence, small farmers are negatively affected by this agreement in Maharashtra.

1.4) Review of Literature:

The paper titled 'Agriculture Subsidies an Introduction' by Sridhar Krishna, point out that international trade in agriculture is highly distorted because of the presence of domestic and export subsidies farms subsidies induce over production of the subsidized crop in developed countries over production and an inelastic demand lead to surpluses which not only preclude import but result in dumping in external markets and this means a sharp fall in the prices in the international market. These lower prices have caused many of the developing countries to exit from farm trade. The World Trade Organization (WTO) member reached a breakthrough in July 2004, which comes to be known as the July framework. In the reduction in subsidies are to

be made not from the actual levels of Aggregate Measure of Support (AMS) but from the bound levels of the Aggregate Measure of Support (AMS) which were committed during the agreement on agriculture negotiations. The share of Asia in world agricultural trade was stagnant at 16.5 percent between 1995 and 2003. Since the distortion in world agriculture trade continues, this is helped tube responsible for the poor performance by India.⁴

Monthly commentary on Indian economic condition, rising food prices a global crisis significantly the looming inert to global food security that recent development point to comes not so much from concerns about food production as from the rising prices of crude oil, which are promoting that division of vital grains to befool production. This was severely distorted the global market of this coarse several, which constitutes a key food item as well as food crop in several parts of the world. While a global food scarcity is a scary phenomenon especially for poor countries with large populations, India can fortunate draw corn fert from the fact its domestic food scene is looking for more comfortable now after the rabbi harvest, than it has been for the past few years, even though food prices are still a matter of concern. Though India is now being accused, along with other countries that have imposed export curbs of turning herders it is far easier to live with that tag than to face the prospect of slipping back to slip to mouth existence once again.⁵

The paper title **'Green but not clear why a comprehensive review of green box subsidies is necessary'** by Liz Styart, point out that the green box criteria should be made stricter and subsidies which still distort trade should be removed from the green box support, payment must not result in price support for producers, must not involve financial transfers from consumers and must be provided through a publicly funded programmers. Decoupled income support can be classified as green box support. Investment aid which is the support given to the farmers to modernize their farms either in the form of a direct payment or by subsidizing interest payments also count as green box support. In the European Union (EU) decoupled support will account for a projected 25 bn on the 50 bn notified in the green box once the 2003 common agriculture policy reforms have been fully implemented. Investment aid and decoupled payment both of which are trade distorting, given by the European Union (EU) and United State (US) will add up to \$ 40 billion a years. Since decoupling was introduced in 1996 in the United State (US) and in 2005 in the European Union (EU),

production has been gone down and in some products it has actually increased and exports has not slowed. Green box payment should only be allowed when payment are directed at small farmers, sustainable agriculture, environmental protection, rural development, food security or poverty reduction. There should be no renewal of the peace clause so that countries can challenge green box payment when they are not minimally trade distorting.⁶

Monthly public opinion surveys articles “**Structural changes in global economy**” Also disconcerting is that the growth of value added in agriculture in the reform era has been negative. The so called new agricultural strategy based on subsidized inputs and incentive prices for rich and middle farmers has been at the cost of the poor farmers and landless farm workers and did not contribute meaningfully to the economic and social objectives of the development process. A reversal of the retrogressive trends in the economy and for strengthening impulses for growth and equity in the Indian economy evidently call for major changes in economic policy as well administrative and political management abilities which are effective to achieve the desired results. The so called structural adjustment process under way in India on which the ruling elite precipitately embarked in 1991 is in a direction opposite and contrary to what is both needed and desirable.⁷

The paper title ‘**should India demand farm subsidy cuts by developed nation**’ authored by **G. Chandrashekhar**, Along with technology particularly agriculture biotechnology subsidies trend to increase production in the short to medium term. While the developing countries are not exporter of primary food and net imports of processed food, the reverse happens to be the case for major developed countries. The European Union (EU), the United States, Japan and Korea account for over 80 percent of total support i.e., producer support, general series est., given by the OECD countries. India provides product specific domestic support in the nature of minimum support price. It also provides non product specific support in the form of either free or subsidized fertilizer, seed, water, power or credit. The aggregate measure of support is however, much less than the de minimis level. In the case of India, higher world oilseed prices as well as vegetable oil price, as result of reduction of subsidies in developed countries may not be desirable since we are a leading importer of edible oils. The United State (US) wheat has a subsidy of about \$ 65 a ton, which is about 50 percent of the current market price. If the wheat subsidy is

reduced world wheat prices would increase. Since India may well turn out to be an importer of wheat high international wheat prices may not be desirable. The European Union (EU) subsidy of \$ 3 billion for 20 million tons of sugar amounts to \$ 150 per ton, accounting for 50 percent of the market price. Since India importing sugar has a greater probability than India being a consistent exporter, the elimination of sugar subsidy by the OECD countries would not be in India's interest. Every tone of commodity produced in the OECD countries is subsidized to the extent of between 25 percent and 50 percent of the market price. These subsidies encourage greater production, increase global supplies, reduce world prices, since reduction or elimination of subsidies would increase world price, consuming and importing nations would be adversely affected.⁸

The paper title, **'Reason why a comprehensive review of green box subsidies is required within the WTO'** written by, **Tim Rice**, proponents of decoupling have argued that by dislodging the link between subsidy and production the incentive for farmers are there by free to produce what the market wants rather than be dictated by a subsidy regime. Action aid contends that such subsidies continue to distort production and trade. As a consequence of the common agricultural policy final agreement in 2003 it is estimated that the European Union (EU) will shift about 70-75 percent of subsidies that are presently in the blue box into the green box for the European Union (EU) 15 about 21.3 billion euro's will soon fall within the ambit of the green box. Green box decoupled direct payments have been a characteristic of the US subsidy regime since 1996 when the FAIR act introduced production flexibility contracts, which were in operation between 1996 and 2002. The farm bill in 2002 contained a similar scheme. The PFCs were not completely decoupled and distorted production for the following reasons. Guaranteed payment was an annual flow of income which the farmer could invest in the farm operation, potentially increasing production. Any income which reduces variation in income risks increases output. When the PFC programme was in operation between 1996 and 2002 the farmer may have felt induced to keep production and average high in case the base reference changed to more recent years. This is precisely what happened in 2002 when the programme changed under the United States (US) farm bill. The payments were not completely decoupled because, while the farmer did not have to produce anything to be eligible for the subsidy, the farmer was not permitted to grow certain other crops

such as fruits and vegetable, providing there by an incentive to keep growing the crops that were eligible for the programmer.⁹

The paper title, **'Selected Success Stories on Agricultural Information System'** by **Sahdev Singh**, reviews the current state of telecommunication policy for rural and agricultural development, diverse applications of new Indian Tobacco Company (ITC) on rural farming areas of selected Asia-Pacific countries. It also assesses the potential impact of Indian Tobacco Company (ITC) in agricultural development by describing two successful cases one from South Korea and the other one from India where Indian Tobacco Company (ITC) has benefited small farmers. 'South Korea's Agricultural Information Services has initiative' by rural development administration in South Korea has disseminated high-yielding cultivars (cultivated plant) and cropping technologies to attain self sufficiency in rice and in some other important food crops. Secondly, Indian Tobacco Company (ICT) Choupal a private sector initiative' has been providing information to the farmers and other village livelihoods in local languages on weather and market prices.¹⁰

The paper title, **'Impact of WTO on export of non timber forest product from India'**, by **Vaideni and Dr.k.Raja, Mohan Rao**, explores the role of non timber forest products (NTFP) in India, domestic use of NTFP and its relation with livelihood security of poor, impact of globalization on NTFP the trends in export of NTFP from India and impact of World Trade Organization (WTO) on NTFP and concluded that the expanding market opportunities for a wide array of NTFP has not yet been the boon to poor people living close to the resource base. This is primarily due to the restrictive policy and regulations, inadequate institutional development input to cope with complex social structure. Above all, the local collector tends to be paid labours charge only, and not a value of the resource in a socially just manner. Identifying appropriate policy options should be a going process with an in built mechanism for participation of representatives of poor community members engaged in NTFP business along with other relevant stakeholder groups.¹¹

The paper title, **'Trade linearization food security and small farmers, implication and policy options'**, by **Dr.Falendra and K.Sudan**, assess the ability of trade liberalization in promoting the food security of the small farmers. He discussed the issues related to food security especially the concept of food security, elements of foods security, dimensions of food security, food access and food consumption,

vulnerability and food insecurity, food safety and food standards and presented food security scenario in Indian context Dr.sudan also explores the problem of food security vis-à-vis small farmers and impact of trade liberalization on food security and highlight the implications and policy options for developing countries including India. The best approach for developing countries is to elevate biases against the agriculture sector in their general policy framework and to maintain a heartily trade liberalization has to contribute positively to ameliorate the lived hoods of the small farmers, the following suggestion are worth considerations an end to any types of export subsidies reduction is systemically high tariffs that close off market access disciplines on domestic subsidies and bound tariff rate so that beggars neighed subsidization and high protection of the rate 1990 are not repeated in the event of low world commodity prices ongoing efforts to keep trade open while accommodating legitimate regulatory goals and scaled up investment in development assistance to strengthen agricultural markets in low income countries.¹²

The paper title, '**WTO & Indian textile trade, emerging challenges**' ,by **Mrs.Laila.P.I and T.Asokan**, to achieve the growth rate visualized in the vision 2010, the key factors under consideration are cost competitiveness, adherence to time schedules, ability to undertake large volume orders, consistency in quality, and quick turnaround times as also availability of raw material in inputs. India will have to sharpen its competitive edge by lowering the operational costs by way of efficient usage of inputs. The industry will have to invest in importing weak links such as weaving and processing. Besides in order to achieve the desired level of economy in scale, the industry will have to be consolidated and expanded. This is the right time that all the stakeholders gear up to face this challenge.¹³

1.5) Objectives of the study:

- 1) To study the subsidies given to agriculture by developed countries.
- 2) To analyze the problems related to World Trade Organization (WTO) Agreement on Agriculture.
- 3) To study the Maharashtra farmers under the World Trade Organization (WTO) regime.
- 4) To identify the protection to the farmers from the Agreement.

1.6) Hypothesis of the study:

The direction and magnitude of the effects of World Trade Organization (WTO) Agreement on Agriculture is helpful to the Maharashtra farmers but it negatively affecting the small farmers of Maharashtra.

1.7) Methodology of the study:

The study mainly based upon secondary source of data. In view to examine the objectives of the study, secondary data on land use pattern, irrigation, production of different crops being produced in the state, modern agriculture inputs, etc. were collected from the reports, documents published by Government of Maharashtra from time to time. Moreover in view to examine the growth prospects of agriculture the period for study is considered reforms period i.e. 1994 to 2006 has been selected.

i) Methods and Techniques of Data analysis:

The present study is based on secondary source of data. This involves collection of all available data. This would indicate development change and trends in the agriculture of Maharashtra state. This data was scattered in published and unpublished record of different departments of the Government of Maharashtra state. Analyses have been taken with both absolute and percentage values. The methods applied include, use of percentage, mean, growth rate, combination techniques. The essential matter so derived is presented in graphs' and table, synthesising a large body of data in to present study.

ii) Sources of Data:

A variety of sources of data have been happed for the preparation of the present dissertation. Most important source of agriculture statistics is the office of commissioner of land records and settlements Maharashtra state. Several publications are brought out by this office. Basic agricultural statistics information about area, production and irrigation, land use, etc. Among them annual publication of agricultural statistics contains valuable information about the area, production and yield crops, irrigation, other developmental measures, has provided many useful data through its publications, particular mention be mode of Statistical Handbook of Maharashtra 1990-91 to 2005-2006, quarterly bulletin of economics and statistics.

iii) Data Processing:

Data has been processed by using different statistical tools like average, percentage, growth rate, and diagram. Available data has been tabulated and processed with the help of ms-excel.

1.8) Limitation of study:

The study has the following limitations:

This study has limited only to the impact of quantitative restrictions and export subsidies under World Trade Organization (WTO) Agreement on Agriculture (AOA). The period of the study is limited from 1994 to 2006.

1.9) Chapter scheme:

The present study includes the follows chapters.

- I) Research Methodology – Include- Introduction, Review of Literature, Title of the study, Objectives of study, Hypothesis of the study, Statement of the problem, Methodology of the study, Methods and Techniques of Data analysis, Sources of Data, Data Processing, Period of Study, Limitation of study, Significance of the study, Chapter scheme .
- II) The Profile of Agriculture Sector in Maharashtra – Includes- Introduction, Administrative parts of Maharashtra, Climate of Maharashtra state, Nature of agriculture in Maharashtra, Nature of monsoon in Maharashtra, Water supply deposits in Maharashtra state, Agricultural production in Maharashtra state, Irrigation in Maharashtra State, Use of improved seeds in Maharashtra, Use of Chemical, Fertilizers and Insecticide, Classification of the farming, Usage of Land, Agriculture Finance, Development in the bio-technology, Land reforms Maharashtra, World Trade Organization.
- III) WTO Agreement and Maharashtra Agricultural sector– Includes- Introduction, New economic policy Indian agriculture sector and farmers, Future of farmers in the free Economy, Objective of the world trade organization (WTO), Function of world trade organization (WTO), Agreement on Agriculture (AOA), Current status of Maharashtra Agriculture sector, Average production of Maharashtra

principal crops, Maharashtra Kharip and Rabbi Crops area and production, Maharashtra Farmers.

- IV) Impact of WTO Agreement on Agriculture in Maharashtra– Includes- Introduction, WTO and impact on agriculture, Impact on The Dunkel draft, Impact on Public distribution services, Impact on Green box subsidies, Impact on Blue box subsidies, Impact on Export subsidies, Impact on Distribution services, Impact on Financial services, Impact on Infrastructural services, Impact on Domestic regulation, Impact on Emergency safeguards, Impact on Environmental services.
- V) Impact of WTO Agreement on Export & Import of Agricultural product Maharashtra-Include- India's Agricultural Import, India's Agricultural Exports, Causes of slow exports of agro products, Horticultural Exports in Maharashtra, Maharashtra Agriculture Export Products, Development of Agriculture Export Zones, Government Policies for Export,
- VI) Export Subsidies on Agriculture in Maharashtra – Includes- Introduction, Present position of Agriculture export, Share of Agricultural subsidies in selected OECD countries, Growth in Agriculture pre and post Globalization, Plan outlay in Agriculture and allied sectors, Agriculture subsidies in India, Horticultural export, WTO and Agricultural export, Export Subsidy and India, Reduction of Export Subsidy, Tariffs and bound rates on major agricultural commodities, Export Subsidy commitments.
- VI) Quantitative Restrictions on Agriculture in Maharashtra – Includes- Introduction, Market Access, Market Access and India, Tariff Escalation and peaks, Tariff Rate Quotas, Tariff and bound rates on major agricultural commodities, Share of output Tariff Quotas, Tariff Reduction, Removal of Reductions.
- VII) Conclusions and Suggestions

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