

## CHAPTER – VI

### PROSPECTS OF EXCHANGE BASED MARKETING OF TIMBER

#### 6.1. Introduction

Policy decision to achieve the target of bringing the forest cover to 33% of the geographical area of the country by 2012 has been taken by the Government of India.

The Government of India also has decided to achieve this target as under:

(a) Within recorded forest area	5.00 million ha.
(b) Outside the recorded forest area	26.46 million ha.

When large areas are involved from the private source, there has to be total involvement of the private individuals, institutions and entrepreneurs. The participation in the plantation programme means willingness to invest money. The primary objectives of the investor in any venture are maximum returns and minimum risk. Trading in derivatives of commodities was first started to protect the farmers from the risk of their crops going below the cost price of their product. Several agricultural commodities are covered under derivatives or futures trading. As yet, timber a purely forest produce, has not been included. When it is expected that there is bound to be involvement of large number of private individuals, in the capacity as planters, traders, it is necessary to explore the possibility of inclusion of timber as a commodity for derivatives trading.

#### 6.2. Inclusion of Timber vis-a-vis Requirements of the Exchange based Marketing

Electronic spot markets can be established for majority of products and can conduct auctions or continuous day trading with trade to trade settlements. Spot exchanges, with the permission of the State Governments can function as private mandies and/or provide electronic auction platform to existing mandi participants. Buyer and sellers would participate in the spot exchanges only through members. Members in turn may seek license from respective mandi samities of the state or get license through exchanges for handling agricultural produce in the state. Electronic spot exchanges need to be accompanied with sufficient warehousing and assaying facilities as conduct of auction and trading for standard products would require pre-assaying and storage at accredited warehouses.

Introduction of electronic spot markets would bring transparency in operations and price discovery in physical commodities market and would benefit farmers who can be assured that there has been no manipulation in the sale procedure. Market access to large number of buyers and sellers would enhance liquidity in the market and enable participation by entities located away from the physical markets. These entities can be assured of the quality of produce by standardized grading, storage and handling systems. Assurance of delivery of quality produce will also attract large industrial players who may pass on the benefits from quality assurance to farmers through

reverse auctions. Electronic exchange can maintain flexibility of current market systems besides complementing futures market where farmer, traders and mill owners can benefit from arbitrage possibilities in the futures and spot markets.

### **6.3. Agent-Based Integrated Services for Timber Production and Sales: An International Overview**

The ability to access and send information from just about anywhere—one of the prime advantages of pervasive computing—is transforming the way we live and work. Pervasive computing's advantages have strengthened countless industries, and now there is a palpable need to enhance just-in-time production and trading in agriculture and forestry. To solve some of the problems in forestry and agriculture, the German Research Center for Artificial Intelligence and the Saarland Ministry of Economics founded the Cooperative Agents and Integrated Services for Logistic and Electronic Trading in Forestry and Agriculture (Casa) project.

The Casa project focuses on developing agent-based information and trading network (ITN). In particular, the project seeks to establish mobile, integrated services in selected application scenarios within forestry and agriculture. Casa ITN supports the main business processes that users perform in customer-oriented dynamic timber production, mobile timber trading, and electronic cereal trading.

The paradigm that informs the Casa ITN project is integrated commerce, an operational extension of traditional e-commerce that entails getting customers more involved in ordering activities so that contractors can more efficiently fulfill orders. I-commerce also entails more effective practical integration of supply-chain processes. In this light, Casa ITN offers its users several i-commerce techniques for negotiating, communicating, and exchanging information more effectively. We anticipate that these techniques will lead to more effective integration of production, logistics, and trading processes in other industries as well.

They have developed agent-based services for a distributed virtual marketplace to facilitate different kinds of trading between the participants within Casa ITN. These trading types can include multiple online auctions or sales through fixed or negotiable prices in bilateral negotiations. Each registered user in Casa ITN might, for example, initiate and perform one or multiple auctions of its own goods and products at any time, anywhere.

The aggregate of Casa ITN agents provides several services to its users:

- **Auction mechanisms:** Agents facilitate several auction types, including Dutch, English, Vickrey, and First-Price-Sealed-Bid auctions. At first-price, open-cry, so-called English auctions, bidders win with and have to pay the amount of the highest bid. In descending price, open-cry, so-called Dutch auctions, the auctioneer sells a single item at the first incoming bid. At first-price, sealed-bid auctions, each bidder submit one bid unaware of all other bids; the highest bidder

wins and pays the amount of the bid. Similarly, at second-price, sealed-bid, so-called Vickrey auctions, the winning bidder pay the price of only the second highest bid.

- **Integrated services for dynamic pricing:** Agents collect information on transportation costs and other constraints to meet as a decision-support service for its users.
- **Logistics services:** Agents provide dynamic transportation scheduling and planning. We use an extended version of the Contract Net protocol, which relies on simulated trading to optimize transportation planning and scheduling.
- **Information management:** Agents gather relevant information on behalf of their users in different trading and production settings.
- **Mobile services:** Agents enable the mobile services that let users access most of the Casa ITN on WAP-enabled mobile devices.

Together, these services form the basis for establishing an ITN for forestry and agriculture. The forestry and agriculture industries are so dynamic that if an information system is to be truly useful, it must offer just-in-time services.

Casa ITN's application scenarios include customer-oriented dynamic timber production, mobile timber sales, and electronic cereal trading. In the Casa ITN system, foresters and timber harvesters cooperate with the service-providing agents to satisfy an individual customer's order and to deliver a certain quantity of timber at a given time. Registered users can set up and participate in multiple timber auctions through WAP-enabled mobile devices. These registered users can also trade grains through auctions or multilateral negotiations with interested parties.

#### **6.4. Standardization of Timber**

Timber is a naturally grown product consisting of various species. Attempt has been made to standardize the classifications in the Gujarat Forest Department. But even in a few depots such standard classification is not followed. Moreover, it is doubtful whether the same standardization is followed all over India or not. This aspects has to be taken with due attention.

#### **6.5. Spot Market**

For all agricultural produce there is a recognized 'Mandi' where the buyers and sellers come together. Such arrangement is not available in every place. Valsad and Nadiad had potential timber market having concentration of saw mills.

#### **6.6. Monopolistic Control**

There is no direct monopolistic control on the prices either from the Government or any individual organization. However, the most popular and best timber species like teak is mainly from the government source and the influence on the price by the government is

indirect. The analysis of the data of sale from Gujarat state forest depots of Dang has shown that 90 % of the sale value is from teak only.

### **6.7. Free Flow of the Commodity**

This is a major block for the inclusion of timber in the exchange based trading. As per the Indian Forest Act the movement of timber is regulated under the rules for the transit of forest produce. Many a times there are inordinate delays in getting such permission. The main purpose of the regulation of transit under the Act is to protect the forests from illegal cutting and removal of timber and other forest produce.

### **6.8. Capability of the Commodity for being stored**

Timber has the capability of being stored. However, timber is generally stored in the open in the Government depots or in open sheds by the traders. Therefore, there is a definite reduction in the quality of the timber if it remains in the open for a long period. Making arrangements against the deterioration in storing needs lot of investment and the gain in doing that may not commensurate with the investment.

### **6.9. Timber Associations**

There are timber merchants Associations. But they are not well organized. There is neither any willingness nor any infrastructure to compile a database for the demand, supply and rates. If any enquiry is made they become suspicious and reluctant to part with whatever information they have with them.

### **6.10. Availability of Capitalized Traders**

The timber traders consist of the moneyed class and therefore they can fulfill this requirement when the future trading is started.

### **6.11. Delivery Period**

The delivery periods considered in the futures standard contracts are based on the time required for the maturity of the agricultural crops. Generally it is not more than six months. However, in case of timber the period of maturity may be from 6/7 years to 60/70 years depending upon the species and the objective of the management of the plantation area.

### **6.12. Market Intelligence**

There is no system of compiling the fluctuations in the daily market prices. The market reports of many commodities from gold, silver to the vegetables are available in the newspapers or displayed on TV. For the commodities dealt by the commodity exchanges there are elaborate arrangements for this. Such system is totally absent for timber. In fact Forest Department being the major

producer and seller of timber has the responsibility of keeping the database for the use of the interested party whether he is a trader or a producer.