Innovating Success by way of “Public Private Partnership” (PPP) Model

It is well known and noticeable from many countries of the world that their economy is growing faster due to Public Private Partnership (PPP) model. This model suggests and aims to create an infrastructure by combining the BEST CAPABILITIES of the public and private relationships which leads to rapid growth in all business sectors. Therefore, PPP model is expected to play a vital role in promotion and development of Sericulture sector also. The strategy is to promote sericulture activity as a roaring profit making industry as it is being carried out by small and marginal farmers and entrepreneurs.

In India Sericulture industry has not grown as it is expected, due to poor business practices and many other problems and barriers, and still it is a cottage industry. In view of this fact Sericulture Research and Development Council (SRDC) has recognized immense potential for growth in sericulture sector on large scale. To reaping the benefits of this sector SRDC is putting a new approach in the form of PPP model and estimating that silk industry will obtain big push in terms of finance, technology, efficiency in production and delivery of products. SRDC will provide necessary working capital and will facilitate other mechanism in order to open Sericulture Service Center for following services on commercial terms:-

- Farmers Networking
- Silkworm Seed Bank
- Automatic Reeling Unit
- Silk Power loom Unit

Therefore, PPP is one of the solutions which tackle these problems and promote mechanization and rationalization in the field of mulberry and automation of the process of silk production and bring down the cost of raw silk. Besides, it will also enhance the economic conditions of reeling activity through effective utilization of By-products which leads to proper and timely marketing facilities, thus, reducing economic imbalance between rural and urban areas. The joint efforts of private and public partnership (PPP) will boost this industry and can make it a Silk Revolution.

“Coming together is beginning; keeping together is progress; working together is success”
Healthy seed is the backbone of sericulture industry. Healthy seed material having high viability is essential for establishing the crop. And also availability of quality silkworm seed in adequate quantities is the prerequisite in achieving the targeted silk production besides improving the productivity parameter. To produce quality seed, it is very important to adopt scientific methods of egg production right from seed crop rearing to egg incubation.

Sericulture Research and Development Council (SRDC) after having research and development over the periods had invested much of its material and manpower to develop well organized and systematic “Silkworm Seed Bank” especially mulberry. SRDC has planned to open Registered “Silkworm Seed Bank” at every block and district level. These Sericulture Service Center (Seed Bank) will be part of the intricate four tier seed production network, and basically will be providing the commercial silkworm seed.

SRDC is proposed to assist private silkworm seed producers by providing financial and technical support to start crossbreed (CB) and bivoltine silkworm seed production. To boost the Silk Industry SRDC is making an offer to farmers, NGOs, Entrepreneurs and all eligible groups to come forward and join our public private partnership (PPP) model to reap the benefits. The proposed scheme is as follows:

**The Total Estimated Cost – to be Invested by SRDC**
(Brief description is given below)

For Mulberry Silkworm Seed Bank works out to be Rs. 95/- lakh.

<table>
<thead>
<tr>
<th>S. No.</th>
<th>Particulars</th>
<th>Cost/Unit (Rs. in Lakhs)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Testing Equipment’s (list of equipment’s is enclosed in manual)</td>
<td>1.50</td>
</tr>
<tr>
<td>2.</td>
<td>Installation of 2 moth rooms and 1 Incubation chamber</td>
<td>16.50</td>
</tr>
<tr>
<td>3.</td>
<td>Installation of cold storage plant (details is enclosed in manual)</td>
<td>41.00</td>
</tr>
<tr>
<td>4.</td>
<td>Infrastructure up gradation including equipment, transport vehicles and quality control measures</td>
<td>35.00</td>
</tr>
<tr>
<td>5.</td>
<td>Quality Certification (ISO)</td>
<td>1.00</td>
</tr>
<tr>
<td><strong>Total Cost</strong></td>
<td></td>
<td><strong>95.00</strong></td>
</tr>
</tbody>
</table>
Sericulture is an important agro industry in Indian Economy. The various research efforts in silk technology have focused on various dimensions of problems of the industry to bring the desired changes and suggest the process of standardization, design and development of appropriate machinery, quality control and effluent management for realistic growth. In post cocoon sector silk reeling is a vital component of sericulture operations. Reeling converts the cocoons into the raw silk yarn.

As we know that there is high demand of quality raw silk yarn in domestic market. But the Indian reelers are not able to meet-out those demands. Because, the reeling sector in India is Cottage based and Highly Decentralized employing traditional reeling devices. Thus, country is dependent on imported raw silk yarn from China.

The current review of the Indian Silk industry reveals that Joint Efforts with mechanized system for planned production of quality cocoons by group of farmers catering to the need of large reelers capable of producing quality raw silk yarn in bulk is strongly required to Reduce dependency on imported raw silk yarn.

SRDC is pioneering and innovating work contributing towards a critical assessment of the silk industry structure in Commercial framework. The study of the entire industry shows that reeling sector strongly requires the adoption of latest modern technologies along with Substantial financial support to meet the current demand of Domestic and International market.

To meet this challenge the SRDC is moving ahead to make Investment in terms of adopting latest Multi-end Reeling units and Automatic Reeling units, along with providing necessary skilled training and management. Simultaneously to boost the silk industry SRDC is making an Offer to Farmers, Entrepreneurs, Corporate and all eligible groups to come forward and Join our public private partnership (PPP) model to make the real gain.

Since reeling activity is highly input (cocoon) dependent. To meet this aspect we are following this value chain………………Farmers------ Cocoon -------- Reeling Unit-------- Raw Silk Yarn.
The *projected scheme* is as follows:

The **Total Estimated Cost To Be Invested By SRDC**

(for Raw silk yarn production- Automatic Reeling machines with different capacity are planned to be established)

(Some projections are given below)

<table>
<thead>
<tr>
<th>Type/ Make of Machinery</th>
<th>Estimated Cost (in Rs.)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Automatic Reeling unit</strong></td>
<td></td>
</tr>
<tr>
<td>capacity – 200 ends unit</td>
<td><strong>72,97,000/-</strong> (or 72 Lakhs 97 Thousand approx.)</td>
</tr>
<tr>
<td><strong>Automatic Reeling unit</strong></td>
<td></td>
</tr>
<tr>
<td>capacity – 400 ends unit</td>
<td><strong>1,35,00,000/-</strong> (or 1 Crore 35 Lakhs approx.)</td>
</tr>
<tr>
<td><strong>Automatic Dupion Reeling unit</strong></td>
<td></td>
</tr>
<tr>
<td>capacity – 142 ends unit</td>
<td><strong>85,00,000/-</strong> (or 85 Lakhs approx.)</td>
</tr>
</tbody>
</table>

- Land and Building (as required)
- Import duty, carriage cost and other expenses
- Installation Cost of Machinery
- Infrastructure Up gradation including equipments
- Transport Vehicles and Quality Control Measures
- Contingencies / Other Expenses

**Total estimated investment cost**

**Up to Rs. 5 Crore**

**Note:**

1. Complete description of each unit and other required Norms is described in operations manual.
2. Any other kind of reeling machines may also be established as per the capacity, demand, requirements, and production / availability of raw material (cocoons).
3. Investment cost may vary in different regions according to various conditions / costs.
Growth And Prospects Of Power Loom Sector In India

(PPP Model)

The power loom sector plays a very important role in the country’s economy. The power loom industry has traditionally been one of the cornerstone’s of the Indian economy. The Indian silk industry is one of the largest generators of employment and foreign exchange for the country. India enjoys a unique global position in term of producing all the commercial useful varieties of silk.

The Indian Silk industry is externally diverse, with the hand woven sector and decentralized power loom sector. The decentralized power loom sector plays a vital role in meeting the clothing needs of the country. Although, India has ranked First in the total number of power looms in the world. The Indian power loom industry contributes more than 60% of the total power loom in the world.

While India’s major competitor china has 2nd position in the world in terms of number of power looms. But the growth rate of china’s sericulture economy is faster than India.

Because, the loom technology level used in the power loom industry is awfully low. Majority of the power looms are conventional plain power looms, shuttle–less power looms and semi automatic power looms and Indian silk industry still lags significantly behind China. Value addition and the manufacturing of fabrics according to customer’s compliances, is not possible due to obsolete technology of looms.

With the advent of globalised free-trade regime the Indian market is open for the other countries. The Indian power loom industry has to face the competition from low cost and high quality silk product.

So, in the present scenario the power loom industry needs more up-gradation and modernization. There is a need of the hour to aware the weavers about the benefits of modernization.

Modernization of silk weaving is on the top of the agenda for the production of Indian silk especially for export production. Notwithstanding the fact that the demand for our traditional handloom goods still persist in certain selected markets, we need to produce finer fabrics in power looms and auto looms to enable us to compete and sustain in the fashion-conscious export markets, in keen competition with china, Korea and Thailand. EOUs and other organization units are now fully equipped with Jet looms, and auto Jacquards.
The Indian silk industry, by and large, remains in the age-old cottage industry sector. If big things are to happen in the Indian silk sector, the industrial group should be approached and attracted for greater participation in setting up organized silk production in modern lines.

To accept this challenge, the Sericulture Research & Development Council is ready to take the entire silk sector, like large Mulberry Plantation, Giant rearing houses and mechanized reeling units, modern silk weaving looms, dyeing and processing houses and also silk exports in a big way.

The promotional Pilot Project has already been launched and started working in many districts and blocks of our Country. These is a greater potential in large – scale corporatization of silk industry in India.

Type of Some Modern Power loom Machinery:

- Water Jet Loom
- Jacquard Loom
- Rapier Loom
- Hair Extension
- Shuttle Loom
- Dobby Weaving Machine
- Circular
- Air Jet Loom
- Auto Jet Loom

SRDC proposed to develop a Power loom Cluster in every state. The initial investment to develop a cluster ranges between Rs. 5 to 7 crores approximately. Total investment is to be made by SRDC. SRDC may give charge to SRA / any other partners to be a part of cluster operation and will be part of in sharing profit.