Chapter VII

Conclusion and suggestions
CHAPTER - VII

CONCLUSION AND SUGGESTIONS

In the preceding chapters of the present thesis a critical appraisal of the development of Sericulture industry in Prakasam District was made. However, the appraisal has been confined to the objectives of the present research work. This study brought to fore many interesting observations throwing light on vital aspects of development of sericulture industry together with its production, finance and marketing problems. These have been dealt in elaborately in Chapter-I to VI.

The first chapter is introductory in nature and spells out the objectives and methodology adopted. Besides it also gives an overview of the role and importance of sericulture industry in India’s economy. It also reviews the development of sericulture under Plan periods in India.

One of the main conclusions enumerating from the second chapter exhibits that sericulture does play an important role in shaping the economic destiny of the people especially the downtrodden and will continue to do so in a more effective. The State of Andhra Pradesh has vast potential for sericulture industry development. Unfortunately this sector remained neglected till the dawn of independence Andhra Pradesh was not a traditional
sericulture State  Sericulture is mainly concentrated in the districts of Anantapur, Chittoor, Cuddapah, Kurnool and Prakasam in the order of importance.

Now Andhra Pradesh has the proud distinction of occupying the second place in sericulture industry in the country next only to Karnataka. Several schemes for the development of sericulture industry are under active implementation and after completion of which the sericulture industry in Andhra Pradesh will march towards a big leap.

The third chapter furnishes a brief profile of the economy of Prakasam District.

Sericulture is not free from problems. There are several production, finance and marketing problems which require immediate attention. Inadequate supply of seed cocoons, poor quality of CBDFLs, low yield of mulberry, unscientific rearing of silkworms, absence of scientific rearing units, defective marketing mechanism of cocoons, wide fluctuations in the prices of cocoons, lack of adequate finance are some of the problems relating to the sericulture industry. All these problems require a scientific probe. Against this, background, the present study analyses the growth, development,
problems and prospects of sericulture industry in Prakasam District in Andhra Pradesh. It is also hoped that the production, finance and marketing facilities have greater impact on sericulture industry development. Further it is also hoped that the existing infrastructure facilities like mulberry demonstration centres, technical service centres, chawki rearing units, seed farms, cocoon markets, reeling units etc., are inadequate to cater to the requirements of sericulturists in the area under study. It is also opined that an efficient production and marketing techniques of cocoons have a stimulating as well as regulatory influence on sericulture industry.

In chapter IV an attempt is being made to review the growth and development of sericulture industry in Prakasam District.

Sericulture has the distinction of occupying the fifth place in the State. Suitable soil and favourable climatic conditions like humidity and rainfall are mainly responsible for such concentration of sericulture industry in the district. Prakasam district which has 75 per cent drought affected area, in the state of Andhra Pradesh has attracted the attention of both Central and State Governments. After considering the significance of sericulture industry in the rural economy, the Government initiated several schemes for the development of sericulture industry in the district. In fact, sericulture has been taken up
as one of the programmes under drought-prone Area programmes to combat the drought. Since then tremendous growth has taken place in the development of sericulture industry in the district. This chapter is designed to focus light on the production, finance and marketing problems of sericulture industry in Prakasam District. An attempt is also being made to examine the cost and net return analysis of cocoons.

In the fifth chapter, an appraisal of the development of sericulture industry in Prakasam District is being made. Spectacular development has taken place in sericulture industry in the area under study and it has become a way of life to many small and marginal farmers and others providing direct and indirect employment with its forward and backward linkages.

Chapter VI of the thesis reviews the impact of some important schemes on the growth and development of sericulture industry in the area under study. With the substantial flow of finance under different schemes aided by the Government, sericulture industry has made a progress in Prakasam District.
SUGGESTIONS

The suggestions are grouped under three heads, namely production, finance and marketing for purpose of proper understanding.

1. Production

Mulberry Cultivation

For mulberry cultivation the land should be plain having no ups and downs and undulations. There should be ridges and furrows for water storage and drainage. As mulberry is a wet dry crop, there should not be water stagnation. Mulberry is a perennial crop, it needs spacing aeriation, fertility, light, water etc. Hence certain precautionary cultural operations should be meticulously followed in mulberry crop. The direction of plantation is quite different when compared to other crops. Mulberry is leaf oriented, whereas the other crops are mostly fruit or grain oriented. Hence proper care should be taken in bringing the land under mulberry cultivation.

Mulberry requires deep, fertile and well-drained, soil, clayey loam in texture with good porosity, moisture holding capacity and minerals. Soil should be slightly acidic and free from injurious salts.
Application of water to soil for the purpose of supply of the moisture is essential for growth of plants. The growth of mulberry plants depends on the type of irrigation. In rain fed conditions, the cost of irrigation will be less, whereas in drought affected areas like Prakasam District, the cost of mulberry cultivation is high. The farmers should adopt scientific mulberry cultivation in order to reduce the cost of cultivation. The scientific methods involved in mulberry cultivation are selection of good quality of mulberry cuttings, application of farm yard manures and fertilizers as per the directions of sericulture department, implementation of cultural operations according to the nature of plantation and timely irrigation.

Favourable climatic conditions will have substantial effect on the production of cocoons. Minimum and maximum temperatures required for mulberry cultivation are between 30°C and 35°C. Hence necessary vegetative plants should be grown for shade and frequent irrigations should be done to subside the high temperature. The low temperature will also have adverse effect on mulberry growth. Succulent leaf is potentially needed to the healthy growth of silkworms. Hence frequent supply of water through irrigations or rainfall is necessary for better yield of mulberry foliage. Eighty per cent water content in the leaf is highly suitable to the chawkie worms (young age worms). Further minimum ten hours of sunlight is necessary for the growth of mulberry. In addition, sufficient aeration helps growth swimmingly.
Techniques of Improving Mulberry Yield:

The following are some of the various improved techniques for better mulberry yield.

Selection of Mulberry seed cuttings:

New varieties of mulberry suitable for different agro-climatic conditions have to be evolved. The varieties have to be tested in different regions for their rooting, viability, productivity and quality of the leaf and after evaluating their performance those which are suitable for a particular agroclimatic zone be recommended for release to that zone.

There are different types of mulberry seed cuttings viz., M5, local, S54, S35 etc. Among them M5 mulberry seed cutting is the best one for plantation and for production of huge quantity of leaf, because the size of the leaf is more succulent, more nutritious with greater percentage of moisture and chlorophyll and is edible for silkworms. The plant has deep rooting capacity, acquainted budding, tolerability for temperature and moisture. Further suitable management and plantation system has to be developed. What is important is not the quantity of the leaf but the quality of the leaf and the productivity of the cocoons per hectare rather than productivity of leaf per hectare. Steps should be taken to supply the qualitative seed cuttings like M5, as and when required by the farmers.
Usage of Farm yard Manure and Chemical Fertilizers:

Based on the variety and its ability to uptake the nutrients for leaf production and based on the areas, suitable dosage of manure and fertilizers has to be assessed and advocated.

The usage of farm manure will improve the structure, texture and porosity of the soil, micro-nutrients, water holding capacity, retention of all minerals. In other sense farm yard manure applied lands yield more quantity of mulberry foliage.

The usage of chemical fertilizers improves not only the quantity but also the quality of leaf. It also reduces diseases, improves the succulency, size and hormones. The cocoons hold good tenacity of yarn, elasticity, durability etc. Hence the farmers should be properly advised in the use of chemical fertilizers. The sericulturists in the area under study should be educated in this regard. Fertilizers should be supplied to them at concessional rates.

Germicides and Pesticides (Sprayers):

The impact of insect pests on mulberry leaf is more in Prakasan District. Grass hoppers, girdles, stem borers, Bihar caterpillars are the
common insect pests in the area. Immediate attention is needed to control and eradicate these insect pests.

Cultural Operations:

Various cultural operations viz., spacing, intercultivation, irrigation, weeding etc., are the main cultural operations, to be meticulously followed in mulberry cultivation. It is very important to see that from plant to plant and from row to row prescribed space (2’ x 9’ and 2’ x 2’) is maintained. Further, method and schedule of pruning according to different agro-climatic conditions has to be developed.

Water play a primary role in the plant growth and the leaf quality of mulberry. In Prakasam District majority of the land is under irrigation. For mulberry it is necessary to irrigate once in 3 days in summer and weekly once in other seasons. It is necessary to understand the soil moisture status and its pattern of depletion in different soils and seasons in relation to mulberry. Accordingly moisture conservation measures have to be developed. It is also necessary to construct bore-wells, electric-bores etc., to provide adequate water facilities. As mulberry is a perennial crop and remains productive for 15-20 years, long-term strategies should be worked out by an integrated approach. The mulberry crop is grown in two distinct types of soil.
viz., deep black cotton soil and shallow red soil. Both edaphic factors are to be taken into account while evolving the strategies. Scientific methods of planting, pruning, harvesting etc., are to be demonstrated to the farmers on a large scale. More field days, film shows, seminars should be conducted to convince the farmers about new technology. Existing extension support must be strengthened. It is very important on the part of the Government to establish more number of mulberry demonstration farms in the district, which help the farmers in adopting modern techniques for increasing the productivity both in terms of quality and quantity.

**Leaf Preservation:**

Preservation of mulberry leaf after harvest is very important in silkworm rearing since freshness, quality and moisture content of the leaves contribute greatly to the success of the cocoon crop. The leaves should be harvested in the early morning hours and late evenings and preserved over a duration of 10-15 hours and occasionally over 20-24 hours for successive feedings. It is always better to preserve mulberry leaf in wet gunny cloth after leaf harvest since it helps not only in retaining freshness and moisture but also in surface moisture absorption.
If the above suggestions are implemented, most of the problems of the sericulturists will be solved and they may help in increasing leaf productivity with improved quality. As a result more layings can be brushed per unit area and better cocoon yield can be obtained.

Silkworm Rearing:

The mulberry silkworms reared in India are mainly multivoltine. In the Southern States of Karnataka, Andhra Pradesh and Tamilnadu, the silkworm eggs are invariably produced from the crossing of multivoltine female moths with bivoltine male moths to ensure hybrid vigour.

Mulberry leaf quality, rearing techniques, productive breeds and seed quality are some of the most important factors that contribute to successful silkworm cocoon crops. Their full impact can be realised only when hygienic rearing conditions are provided, ensuring effective disinfection of rearing space and manipulations of required rearing temperature and humidity. These measures are difficult to practice unless rearing is conducted in a separate house.

It is revealed by the field studies that more than 70 per cent of the sericulturists in Prakasam District have no separate rearing houses. Due to
Inadequate finance the farmers in Prakasam District are not in a position to construct separate houses for silkworm rearing. It is in this context, the need for designing and popularising low-cost rearing houses that are technically fit and suitable for climatic conditions was felt. To control the high temperature during the summer months, mechanical air-conditioning is an alternative but is too expensive for an average agriculturist. It is, therefore, necessary to evolve some economical cooling device through selection of proper material for wall and roof construction, orientation of buildings, wise using treatments, construction method, design etc. Designing of low-cost rearing houses will also have to be taken into consideration keeping in view the average holding of mulberry leaf and brushing capacity of the farmer.

The following suggestions are offered for better practice of silkworm rearing.

1. For cocoon spinning the age-old chandlikas are in use. The cocoons spun on these chandlikas have uneven thickness which affects reeling. There is need to develop suitable montages at low cost.

2. Majority of the farmers in Prakasam District are using old and outdated rearing equipment like rearing bed, bamboo trays, wooden stands etc. This traditional and unscientific rearing equipment should be immediately replaced.
It is very important to note the leaf requirement at each and every stage, basing on the number of layings to be reared.

Effective methods of detecting pebrine spores have to be developed. The life-cycle of pebrine spore and its multiplication-rate under the existing climatic conditions have to be studied. Different strains of pebrine have to be identified and their pathogenicity has to be assessed.

The loss of cocoon crops is heavy mainly due to Uzi-fly infestation and to effectively control this uziicide has been developed. Uziuide is benzene acid formulation and by spraying it can kill the eggs of Uzi-fly laid on silkworms. These are now under commercial production by pesticides manufacturers. Further, there is also loss to cocoon crops due to flacherie and grasserie. The Research Institutes under the Central Silk Board have developed a mixture of disinfectant and fungicide to control these. In this context, the sericulture department may be advised to supply these pesticides freely or at least at subsidy rates to the sericulturists.

Majority of the farmers in the area under study do not know how to disinfect their rearing houses and rearing appliances. Hence, it is better to depute technical staff along with the mobile van to provide disinfection facilities to the farmers in rural areas. If possible, it is
very good to supply nylon nets freely or at concessional rates, which help the farmers in protecting silkworms from the insect pests like Uzi-fly

A suitable catering testing system has to be developed to test the quality as well as quantity of cocoons

At the time of reeling, silkworm pupae is removed which is not properly stored in the reeling units in Prakasan District. The person-in-charge of silk reeling unit has to take care of storing raw or paste, which hence has the following advantages

(i) Silkworm pupae and the waste from reeling are rich in protein (75%) and fat. It is also a good source of vitamins. Reduced protein oil of pupae is superior to that of fish meal nearly equal to one of beef. It is used as food in the eastern and north-easter regions of the country

(ii) The pupae may be utilized as poultry feed

(iii) The pupae may serve as fish food

(iv) Oil may also be extracted from pupae which is used for manufacture of soaps etc

The farmer should be given training in modern technology with regard to disinfection, optimal brushing of charkha's reeling, impact of ecological factors, feeding, spacing, bed cleaning, care during mulching and
harvesting of cocoons. The sericulture department should establish silkworm training centres widely in the areas where sericulture is under practice. The Sericultural Research and Training Institutes in the country are actually engaged in evolving modern techniques of mulberry cultivation and silkworm rearing. The farmers should be given more technical and extensive support for adopting the improved technology of sericultural activities under hygienic conditions for improved productivity of better quality cocoons.

The Government should establish as many chawkie rearing units and voluntary chawkie rearing units as possible at all focal points of sericulture.

Improvement of Grainage Performance and Organization of Seed Areas

At present, one high capacity and one small capacity grainages are functioning in Prakasam District, under the control of Assistant Director of Sericulture. Grainages are intended to produce seed layings and cross-breed layings. It is revealed by field investigation that around one thousand layings are required for one acre of mulberry for one year. At present in Prakasam District, 1842 acres of land is under mulberry cultivation, consequently, 18.42 lakh number of layings are required. But the production of layings in the district is very poor and at least 25 per cent of the requirement is not met.
To meet the above demand the availability of bivoltine seed cocoons and local seed cocoons is not up to the mark.

There is an urgent need to exploit the existing capacity of the grainages in the district otherwise the inadequate supply of crossbreed disease free layings will have adverse effect on the development of sericulture industry. If the layings are not available, farmers will stop their sericultural activities.

The main reason for the poor functioning of grainages is short supply of seed cocoons. Hence it is necessary to organise the seed areas more effectively for timely supply of raw material (seed cocoons) to the grainages. At present there are some areas notified as 'seed areas' in Chimakurthy and Talur blocks of Prakasam District.

The following remedial measures are suggested for better organisation of seed areas:

1. The seed farms should be given special treatment by strengthening the staff position, providing rearing sheds and assured irrigation facilities.

2. The staff specially trained in breeding techniques and skills should be posted to seed areas and should be allowed to continue in the same
in order to gain expertise. For this purpose officers with agricultural training should be selected for training. Efficiency and good work in seed production should be recognised and rewarded.

3. The management of the mulberry garden and seed cocoon production programme should be planned in such a way that the adverse seasonal conditions could be avoided.

4. The seed farms should be allowed to function freely without financial and physical constraints.

5. In the mulberry and bivolume seed areas, arrangements should be made to effectively disinfect all the rearing houses. The workers posted to seed areas should be well trained and experienced in seed technology, so that they can convince and educate the reapers to adopt modern technology in seed cocoon production.

6. It is very essential to establish seed areas in all important places where agriculture is under practice. A separate seed area for bivolume and mulberry has to be planned and organised immediately or systemically.

7. The reapers of seed cocoons should be given some attractive subsidies and incentives by the Government in order to motivate them, since rearing of pure races involves added cost.
It is necessary on the part of the Government to take concerted efforts for obtaining self-sufficiency in seed cocoons. For this purpose some villages will have to be selected and adopted for producing seed cocoons alone.

It can be made possible to operate the existing gramajas at their installed capacity if adequate seed cocoons are available.

Timely Supply of CBDFLs:

The farmers in Prokashin District are getting the CBDFLs from the Government gramajas. The people living in rural areas are far away from the places of gramajas. Hence it is advisable to establish the branches or selling counters in all the areas of sericulture for selling CBDFLs. If it is not possible, at least some mobile vans may be engaged to ensure timely supply of CBDFLs. It is also necessary to improve the quality of layings for obtaining qualitative reeling cocoons.

Establishment of mini-gramajas according to modern technology in all important areas of sericulture helps the farmers in the timely supply of layings.
Supply of Silkworm Eggs (Layings) in Standardised Boxes:

The farmers in Andhra Pradesh usually buy the silkworm eggs from Government grainages. The silkworm eggs in general are not sold in standardised boxes as in other advanced sericulture practicing countries. The eggs are laid by silkworm moths on egg sheet containing 20 squares at one square for each moth. It is advised to supply the layings to the farmers in standardised boxes instead of sheets. Supply through standardised boxes prevents deterioration and preserves freshness and quality.

Crop Insurance Scheme:

To save the cocoon production from various pre-harvest risks/damages, crop insurance scheme should be implemented. At present, the seed rearers alone are enjoying the benefits of crop insurance scheme. The Government has to take initiative in making this scheme applicable to the cross breed rearers also.

Extension and Innovation:

Silkworm rearing is a complicated process, various technical and scientific aspects are to be understood and implemented for high productivity. It demands strong extension and innovation service which has to be strengthened. During the period of silkworm rearing, the sericulturists need
lot of scientific information, skill and knowledge. The field level officers are 
required to pay frequent visits to the sericulturists to guide them properly in 
their operations for disseminating information for a better harvest. This shall 
be followed by distribution of literature published by the department and 
organising field days by highlighting the process of a successful farmer who 
will be asked to share his experience with others. This has a greater impact 
on his fellow farmers in the village. In addition, seminars, conferences should 
be organised to discuss some of the field problems. Documentary films have 
to be produced and shown on the importance of improved technology for 
better audio-visual effects. Frequent radio talks are to be arranged to tackle 
some of the regional problems. Speedy growth of sericulture postulates 
intensive extension service to facilitate healthy innovation. Improving 
innovation at various stages of sericulture may facilitate increasing 
productivity and income as a compensation for the risk in silkworm rearing. 
It is necessary on the part of the Government to strengthen the staff position 
in educating the farmers for better practice of silkworm rearing.

II. Finance:

At present, majority of the sericulturists in Prakasam District are 
getting financial assistance both for fixed and working capital requirements 
from the indigenous village money-lenders and sometimes from the reellers.
The financial assistance from the commercial banks and other financial institutions is inadequate to meet the requirements of the farmers. In some areas, the co-operative and commercial banks are reluctant to extend loans to sericulturists. Further, the farmers are supposed to pledge collateral securities for getting loans. As these farmers are not in a position to provide collateral securities, most of them have to depend upon the village money-lenders who charge exorbitant rates of interest.

The Government should intervene on time to restore normal credit flows for sericulture activities from banks and other organised credit institutions. The regional rural banks should come forward with a plan to extend loan facilities to farmers at liberal terms. They should also adopt some villages and develop sericulture.

The sericulturists should form into co-operative societies. Most of the sericulturists in the area under study are illiterates and they have no proper idea about co-operative societies. Hence there is an urgent need to inculcate the habit of co-operation among the farmers. Further, the Government should arrange adequate financial facilities to those co-operative societies. The co-operative societies should be directed and guided by the Government in extending finance to the farmers in their sericultural activities. Apart from
supply of credit facilities the co-operatives should also consider the supply of agricultural inputs, layings, disinfection material at concessional rates

All small and marginal farmers who are below the poverty line should be given adequate financial aid without insisting on security or mortgage.

The flow of finance from the side of the Government is also said to be inadequate to meet the infrastructural facilities like mulberry demonstration farms, chowki rearing centres, technical service centres, granaries, coconuts, markets and reeling units. Mulberry demonstration farms help the farmers in getting higher yield of mulberry foliage. It is necessary to establish them wisely in the area of sericulture. Chowki rearing units help in getting higher yield of cocoons. Technical service centres enable the farmers to gain technical knowledge in operating sericulture in the light of modern technology. Granaries help in meeting the laying requirements of the farmers. Coconuts markets help the farmers in marketing cocoons. Silk reeling units fetch high demand for cocoons.

The Government should give top priority in providing all the above infrastructure facilities to have an all round development of sericulture in Prakasam District.
III. Marketing (Disposal of Cocoons):

Government has passed a separate Market legislation under which a few cocoon markets are established and some of the reeling units are recognised for benefitting the sericulturists in marketing their produce i.e., cocoons.

It can be said without doubt that the reelers (traders) and rearers (growers) have derived manifold benefits after the establishment of cocoon markets. The elimination of middlemen has given a great relief to the farmers and reelers. These middlemen have been getting the bulk portion of the earnings. These markets provided an opportunity for the traders and growers to assemble at one place which ensures healthy competitions. There is also freedom for the farmer to have transaction for his cocoons in any of the markets in the State and to get a lucrative amount. The farmer gets a price according to the quality of his cocoons and is now assured of spot payment in cash as soon as his cocoons are marketed.

However, there are many hindrances and defects involved in the marketing organisation of cocoons. For eradicating the existing ills of the marketing operations of cocoons the following suggestions are recommended.
Improvement in Transport Facilities

The sericulturists in the area under study have no proper transport facilities. The cocoon market is situated in place, which is far away from the villages. Further the existing road transport facilities are very poor. Cocoon are very smooth and valuable and due care should be taken while transporting. They must be kept in open places for free air. At present the farmers in the district are transporting their cocoon to markets through buses, by keeping the bags of cocoon inside and at the top of the buses. If the bus is loaded heavily there are more chances of damage to the cocoon. The interior rural areas where mulberry is grown abundantly, are to be connected with cocoon market by road. Departmental vans should be organised to provide transport facilities to the sericulturists.

Cold Storage Facilities:

The existing cocoon markets do not offer proper storage facilities. Hence cold storages are to be established with a view to provide facilities to consign seed cocoon, moths, DFLs and reeling cocoon. Cold storage facilities will help in preserving the product against deterioration and obsolescence.
Improving Reeling Capacity:

The demand of cocoons, most probably depends upon the number of reeling units. There are no adequate reeling units in Government sector. It is necessary to establish large number of reeling units to get more demand for cocoons. The Government should pay attention on the establishment of reeling units under Government as well as private sectors. Private people should be given subsidies and incentives for establishing more reeling units. It is noticed that existing reeling units in the district are not functioning at their installed capacity. They are not able to consume at least 50 per cent of the cocoons produced in the district. Hence, it is necessary on the part of the Government to take concrete and constructive steps to operate the reeling units at their installed capacity.

Promotion of Co-operative Marketing:

Although there are some co-operative societies in the State, they are totally inadequate and inefficient to meet the requirements of the sericulturists. Hence, the need of the hour is to organise the growers within the fold of co-operatives. This system of marketing will increase the price, decrease marketing cost, remove various malpractices and trade abuses and increase bargaining power of the growers.
Entry of Karnataka Reelers (Traders):

The rigid character of the cocoon market legislation to some extent does not allow the poor farmers in receiving remunerative price for his cocoons offered by other states like Karnataka. Further Karnataka reelers are not allowed to participate in the bidding of our cocoon markets. If Karnataka reelers are freely permitted without hard and fast rules to participate in bidding, the domination of local reelers can be controlled to a very considerable extent and it is possible for the farmer to get a higher price for his produce.

Educating the Growers:

Adequate arrangements should be made for imparting training and education to the growers so as to equip them to face the cocoon marketing challenges. They should be educated about the marketing system of cocoons.

Establishing Cocoon Markets:

The existing cocoon markets are insufficient to meet the requirements of cocoon rearers. For the entire State there are only eight cocoon markets which are far away from the areas of sericulture practice. It is necessary to establish adequate number of cocoon markets to provide marketing facilities to the sericulturists. The field investigations revealed that majority of the
farmers in the district are badly in need of marketing facilities. The cocoon production in Prakasam District has considerably increased. Much of this produce in the absence of a network of cocoon markets, is finding its way into the neighbouring state of Karnataka. Hence it is very important to establish at least a few branches of cocoon markets in the rural areas.

Fixation of Remunerative Price:

The cocoon is generally marketed through bidding conducted in the Government market. The reeler and rearers participate in open auction. The price secured by the farmer in bidding may or may not be remunerative. If he is unable to secure remunerative price, the effect will be very severe. The grower may not show interest in sericulture. So it is most essential on the part of the Government to fix up remunerative price for cocoons, instead of conducting bidding. Fixation of remunerative price prevents the traders and marketing staff from malpractices. Therefore, the Government should fix up a uniform price which will be remunerative to the rearers.

Adopting of Scientific Grading:

The present practice of grading in the cocoon markets is unsatisfactory, which results in reduction in the net return of the sericulturists. Scientific grading system should be introduced in the markets with the help of suitable
grading machines to provide remunerative price to the farmer. The Government has to take initiation in providing scientific grading facilities, which include establishment of grade specification and enforcement of grading programmes, operations of inspection systems etc.

Market Information and News Service:

Market information centres should be established in order to provide the sericulturists with day to day knowledge and information about the happenings and trends prevailing in marketing not only within the state but also outside the State. The Government cocoon markets should take initiation to collect marketing information and supply it to the rural areas. Upto-date information regarding price, demand and supply of cocoons should be made known to the farmers.

The above said suggestions, if implemented properly would prove a 'gate way' to the future prosperity of sericulture industry in Prakasam District.