Annexure 1.1

I. LIST OF KHADI AND VILLAGE INDUSTRIES

I. KHADI: (Cotton, Silk, Woollen and Dann Carpet)

II. VILLAGE INDUSTRIES

Village Industries / schemes under the purview of KVIC are grouped as under:

Group I: Mineral Based Industry


Group - II: Forest Based Industry

Group-III: Agro Based and Food Industry

(28) Processing, packing and marketing of cereals, pulses, spices, condiments, masala etc.  
(29) Noodles making  
(30) Power atta chalcki  
(31) Daliya making  
(32) Mini rice shelling unit  
(33) Palmgur making and other palm product industry  
(34) Manufacture of cane gur and Khandasari  
(35) Indian sweets making  
(36) Raswanti - Sugarcane juice catering unit  
(37) Bee-keeping  
(38) Fruits and vegetable processing, preservation and canning including pickup  
(39) Ghani oil industry  
(40) Methol oil  
(41) Fibre other than coir  
(42) Collection of forest plants and fruits for medicinal purpose  
(43) Processing of maize and ragi  
(44) Pith work, manufacture of pith mats, and garlands etc.  
(45) Cashew processing  
(46) Leaf cupd making  
(47) Milk products making unit  
(48) Cattle feed, Poultry feed making.

Group-IV: Polymer and Chemical Based Industry

(49) Flaying, curing and tanning of hides and skins and ancillary industries connected with the same and cottage leather industry  
(50) Cottage soap Industry  
(51) Manufacture of rubber goods (dipped latex products)  
(52) Products out of rexin, PVC, etc.  
(53) Horn and bone including ivory product  
(54) Candle, camphor and sealing wax making  
(55) Manufacture of packing items of plastics  
(56) Manufacture of bindi  
(57) Manufacture of mehandi  
(58) Manufacture of essential Oils  
(59) Manufacture of hair oil  
(61) Detergent and washing powder making (non-toxic)

Group-V: Engineering and Non conventional Energy

(62) Carpentry  
(63) Blacksmithy  
(64) Manufacture of house hold aluminium  
(65) use of manure and methane  
(66) Vermiculture and waste disposal  
(67) Manufacture of paper pins, clips, safety pins, stove pins, etc.  
(68) Manufacture of decorative bulbs, bottles, glass  
(69) Umbrella assembling  
(70) Solar and wind energy implements  
(71) Manufacture of handmade utensils out of brass  
(72) Manufacture of
handmade utensils out of copper (73) Manufacture of handmade utensils out of bell metal (74) Other articles made out of brass, copper and bell metal (75) Production of radios (76) production of cassette player whether or not fitted with radio (77) Production of cassette recorder whether or not fitted with radio pieces (80) Carved wood and artistic furniture making (81) Tin smithy (82) Motor winding (83) Wire net making (84) Iron grill making (85) Manufacture of rural transport vehicles such as hand carts, bullock carts, small boats, assembly of bicycles, cycle rickshaw, motorised carts, etc. (86) Manufacture of musical instruments.

Group - VI: Textile Industry (excluding Khadi)

(87) Polyvastra which means any clothe woven on handloom in India from yam handspun in India from a mixture of manmade fibre with either cotton, silk or wool or with any two or all of them or from a mixture of manmade fibre yarn handspun in India with either cotton, silk or woollen yarn handspun in India or with any two or all of such yarn. (88) Manufacture of Lok vastra cloth (89) Hosiery (90) Tailoring and preparation of ready-made garments. (91) Batic works. (92) Toys & doll making (93) Tailoring balls and woollen balling, lacchi making (94) Embrodiery (95) Manufacture of surgical bandages (96) Stove wicks (97) Embrodiery of fabrics.

Group- VII: Service Industry

(98) Laundry (99) Barber (100) Plumbing (101) Servicing of electronics wiring and electronics domestic appliances and equipments (102) Repairs of diesel engines, pumpsets etc. (103) Tyre vulcanising unit (104) Agriculture servicing for sprayers, insecticides, pumpsets, etc. (105) Hiring of sound system like loud speaker, amplifier, mike, etc. (106) Battery charging (107) Art board painting (108) Cycle repair shops (109) Masonary (110) Bank troupe (111) Motorised local boat (fibre glass) for goa only (112) Motor Cycle to fly as taxi (for Goa only) (113) Musical instruments (for Goa only (114) Dhabas (Not serving liquor) (115) Tea stall.
Annexure 1.2

List of handicrafts provided by District industries Centre, Tiruchirappalli

Caipets.
Hand printing.
Artistic textiles.
Embroidery and zari work.
Metalware.
Jewellery.
Bangle and beads.
Conch shell.
Wood work.
Ceramic.
Stone work.
Cane, bamboo straw etc.
Flax fibre.
Toys and Dolls.
Paper machine.
Ivory, horn and bone.
Leather.
Musical Instruments.
Icon and perfumery.
Pottery.
Miscellaneous.
Annexure 1.3

List of cottage Industries provided by District industries Centre, Tiruchirappalli

Name of the craft

Areecanut cutting     Appium Manufacture.     Bee-Keeping (Apiculture)
Coffee roasting and grinding. Dehydrated fruits and vegetables.
Fruit canning.
Jaggery manufacture, gur making from sugar cane, date palm or palmyrah &
coconut tree, hand made sugar, sugar candy.
Jam, Jellies & preserves. Syrups, aerated water, ice making.
Vermicelli Manufacture.
Apparel and ready made clothing (including) Sarees, Dhothies.
Artificial flowers. Aloe fibre extraction - palmyrah, coconut fibres.
Banian manufacture. Blanket. Block engraving for cloth finishing.
Brush manufacture. Button making out of mother of pearl, horn, brass
and tin. Calico printing. Canvas shoe manufacture Embroidery,
Knitting, Crochet and needle work. Hosiery (with hand and power).
Laundry and cleaning clothes. Leather goods making, boots, shoes,
chapels, slippers, bed spreads. Ornament and Jewellery.
Ornamental leather crafts, money purses and hand bags.
Weaving - Cotton, wool, jute, silk. Spinning-cotton, wool in charkas.
Fly structure loom making. Ribbon manufacture.
Cane furniture (also cane and basket ware, matting).
Cement ware works. Coir, coir ropes. Ladle sticks manufacture.
Agarbathi making. Manufacture of card board mid card hoard boxes.

Handmade paper pulp, paper cutting and paper fans.

Inks, ink pad (for rubber stamps). Lapidary work.

Musical instruments - stringed. Painting on blanks and glass.


Printing and allied trade book binding, block making.

Soap making. Korai mats, plates, hand bags.


Decorticating and hall by hand grinding.

Twisting and winding of silk and cotton yarn.

Twining of silk thread, cotton thread and artificial yarns.

Wax coating on papers and cloth. Power ghani. Coconut.

Plastic wire making - furniture. Pickles and mixture making.


Wiring horns for motor vehicle. Photo and picture framing works.

Cotton bed and pillow.

Murakku.
ANNEXURE IV

TECHNOLOGY EVOLUTION AND THE KHAD1 AND VILLAGE INDUSTRIES COMMISSION

The appropriate technology is a technology which contributes the most to the economic, social and environmental objectives of development. Thus appropriate technologies will vary over a period of time in response to the changing conditions. During the development of these appropriate technologies, emphasis has been given to make them labour-intensive as well as simple which can be used by the rural poor.

Technology should reduce, if not eliminate the drudgery, and should enable the users to earn living wages comparable to the ruling agricultural wages in that area. It should improve the level of productivity and quality and should utilise local resource. It should utilise more and more non-conventional energy resources rather than depleting the sources of energy and should not only improve the tools and instruments but should also diversify the products.

The development strategy for the Sixth Five Year Plan was chalked out in consonance with the above objectives. It emphasised the creation of conditions in which in artisans engaged in Khadi and Village Industries could be in a position to earn the minimum wage returns. For creating such conditions it was envisaged to take the following measures;

Supply of improved tools and equipment and machines on the one hand and adoption of improved techniques of production on the other;

Provision of technical and consultancy services and help in identification of new raw materials and diversification of production activities;

Provision for setting up research and development organisations in order to improve the techniques of production as far as the instruments and methods of production are concerned.

The Five Year Plans for Khadi and Village Industries also emphasised that there should be a constant endeavour to adopt progressively appropriate technology. It was felt that this would raise the productivity on the one hand and reduce the cost of production on the other. Reduction in the cost of production and improvement in the quality will enhance the saleability of the products and with the increase in productivity, earnings of artisans will also increase. With the continuous increase of income in real terms, the tendency of artisans to migrate to urban living can be contained to an appreciable extent.
Thus the basic approach towards the adoption of improved technology would be evolution of a labour-intensive technology which could enable the artisans to have fuller employment with improved earnings.

Five Year Plan and Technology Strategies:

The approach of the Khadi and Village Industries Commission is to introduce the improved technology with a view to reducing the price of the finished products, improving the quality of the products, improving the saleability of the products and increasing the earnings of the artisans. This approach has been generally accepted by planners. In the First Plan emphasis was on the improvement of technology with a view to maximum utilisation of idle and leisure time of agriculturists during off-season. In the Second Plan, the Karve Committee recommended that future capital investment should be only on the improved methods of production and improved tools and equipment of production. It was also suggested that under the conditions of common production programme, these traditional industries may become viable with the adoption of improved technology wherever feasible. In the Third Plan, more significance was attached to the positive forms of assistance such as improvement of sales by importing training in improved methods of production, arranging technical guidance and introduction of improved equipment. The need for improving the productivity of tools and equipment of the artisans was highlighted.

In the Fourth Plan the basic approach was development oriented. It emphasised the adoption of appropriate/intermediate technology on a wider scale as a suitable instrument to ensure the benefits of socio-economic objectives of the plan. The concept of viability of an industry was spelt out and the idea of wider coverage by rural industrialisation by progressively raising the level of techniques of production was accepted. It was also suggested that the time-bound programme of 7 years for progressively adopting the improved technology for attaining viability may be worked out. Quite consistent with the earlier approach, the Fifth Five Year Plan for the Khadi and Village Industries laid considerable emphasis on (i) adoption of improved tools and equipment and machinery in the field including power-operated tools etc. (ii) popularising the improved methods of production, (iii) extension services for carrying laboratory research in the field of multiplication, (iv) diversification with an eye on maximum utilisation of bye-products and (v) product development with a view to adjusting the production to the changing pattern of demand.

In the Sixth Five Year Plan, the matter of adoption and transfer of imported technology to the field has been very much emphasised mainly to bridge the gap in the field of instrumentation and use of non-conventional raw materials and recycling of waste and also to have potential for diversification and maximum utilisation of by-products. Quality
control measures to maintain and improve the standards in the quality of the KVI products have also been very much emphasised in the Sixth Plan for KVIC as far as R & D programme is concerned.

Approach of the Khadi and Village Industries Commission:

The Khadi and Village Industries Commission has provided fairly extensive research facilities in the course of the last two decades. Several research institutes were set up for carrying out research in various centres. The Jamnalal Bajaj Central Research Institute for Village Industries at Wardha, Maharashtra was established in 1955 to serve as a link between national laboratories on the one hand and small research centres in the field of Khadi and village industries on the other.

Various institutions for scientific probing into the technology problems in the field, were setup. In order to introduce and transfer the improved and appropriate technology, the commission launched the science and technology programme on the recommendations of the panels for village industries and khadi, appointed by the National Council for Science & Technology in the year 1975. The commission then created a science and technology directorate in order to coordinate the various activities of research and development not only in the commission itself but also with the national laboratories and technical and engineering institutions.

Properly to guide and monitor the science and technology programme of the commission, a standing committee on science & technology has been constituted by the commission on which are represented various agencies like Council of Scientific and Industrial Research (CSIR) Department of Science & Technology, Government of India, National Small Industries Corporation and Union ministry of industry. All the new projects, which are identified by the Industry directors as based on the problems of industry in the field are first scrutinised by the Standing Committee and then they are implemented in the laboratory either in the commission's research institute or in the national laboratories.

In order to meet the demand for the improved instruments and machines, the commission created an instrumentation cell for the speedy manufacture and fabrication of improved tools and equipment. The programme of technology upgradation is taken up not only departmentally by KVIC through its R & D centres but also by private entrepreneurs and other institutions implementing KVI programme.

In the case of cotton khadi, the coarse cloth has its own demand in the market. The traditional charkha has a very low productivity of about only two hanks in eight working hours. The pot charkha, the latest technological breakthrough for coarse yarn spinning, can spin yarn of upto 20 metric count straight from carded sliver and has the productivity of 8
hank in 8 working hours on a single pot. Three models of the pot charkha having one, two and three pots have been developed. The new model charkha (NMC) having upto 12 spindles has already been introduced in the field and is adopted by the Rural textile centres of our study. The productivity of the charkha can be further increased by using anti-wedge ring and elliptical travellers. The increased production on this charkha is attributed to the increased delivery and higher speed of the spindles. It is being put for trial.

To spin fancy yarn with slubs at intervals, a slub-spinning charkha has been developed and is being offered for trial. It produces yarn with slubs at regular and predetermined distances. This yarn can be twisted with regular yarn for producing khadi in attractive designs. Another implement for this purpose is the fancy doubler which is also offered for trial. It produced fancy doubled yarn with spiral yarn, knot etc.

A 6-spindle implement using ring spinning technology has been developed for twisting yarn. It is expected to have higher productivity and produce twisted yarn of superior quality. A doubling and twisting ring frame has also been developed and offered for trial. It would be useful for twisting in sizeable quantity. With a view to totally eliminating winding of yarn in weaving operation a modification has been made to wind the yarn directly on pirn and the same is put up for trial. To facilitate comparison, six spindle NMC is also being tried.

Yarn mercerisation machine:

In view of the non-availability of a suitable mercerising equipment in the textile machinery, for hand-spun yarn a project was undertaken under S&T programme of KVIC, as a result of which a machine was developed. It is specially designed for very efficient processing of the yarn for small units with better results. The mercerising sequence is controlled as per the processing timings by the electronic timer. The distance between the 2 rollers, on which the hanks are mounted, can be adjusted as per the requirements. The roller is driven by electric motor and the speed is controlled by the reduction gear. The durable neophine rubber rollers are easily replaceable. The forward and backward movements of the rollers raising and lowering of the tanks are designed, measures, in such a way that the operations can be conducted without causing any fatigue to the operator. The electronic timer is set to give the best results and superior lustre to the yarn. The yarn thus mercerised would be more suitable for weaving.

Almost all the Khadi institutions in Tamil Nadu, including those units in the district, have adopted the technological innovations, especially in the pre-spinning and spinning activities. The Nepali loom; as suggested by the research institutions, has been introduced, especially to train new entrants to the weaving profession. This has opened fresh vistas of
employment and, to certain extent, solved the problem of accumulation of yarn due to paucity of weavers.

With regard to KVIC's small scale power-operated toilet soap making machinery evolved in 1978 has been a revolutionary breakthrough to decentralise the production of this sophisticated product. Besides creating better utilisation avenues for NEO oils, this decentralisation has opened out better employment potential.

Use of double plodder in the toilet soap unit would enhance the quality of the soap cake in respect of texture, finish, perfume and performance.

Liquid soap manufacturing kettle: As a step towards meeting consumer demand and making the units more productive through diversified products, a power operated kettle for manufacturing liquid soap, soft soap, phenol etc. is being introduced in the village industry field. It has to be observed how far it is economical and acceptable.

In production of chrome tanned leather in the tanning industries there is an absolute need to have a hot plating and machine to give the desired finishing effect on the leather surface. In cottage tanning units it is not possible to invest about rupees four lakhs on this machine like that of the organised sector. So the KVIC has designed and fabricated a small hot plating machine to cater to the needs of the cottage tanners.

Strap cutting machine: A good number of laces and straps can be cut with this handy machine at a time by simply changing the spacers in between the cutters. The machine can be supplied with stand and table for power operation.

Skiving machine: Any kind of upper leather can be skived with it very quickly and accurately. The feed roll and pressure foot can be easily replaced, no tools are required. The machine is provided with an efficient grinding apparatus by which the carefully embedded bell knife can be ground during the operation. The machine has skiving width capacity of 50 mm. The machine can be supplied with suitable height adjustable table, complete with arrangements, for power drive also.

Sole (leather) splitting machine: It can split any kind of vegetable tanned leather. Highly precise steel tooth-feed roller pulls the leather evenly while working. A graduated scale is provided with the machine to set it for desired thickness of split by tenths of millimetres. The machine can be supplied with table and other arrangements for power drive also.
MANPOWER RESOURCE INVENTORY

QUESTIONNAIRE – RURAL INDUSTRY

1. Name and Address of the unit:

2. Category of the unit:
   - Coir / Sericulture / Handicrafts / SSI / Handloom / KVI / Voluntary institution
   - Cottage industry

3. Whether Sole Proprietorship
   - Partnership
     (mention Number of Partners)
   - Joint stock company

4. Whether the unit is
   - Household unit
   - Firm
   - Co-operative

5. Year of registration
   - ii) Date of license
   - iii) Date of establishment

6. Owner’s Name
   - ii) Age
   - iii) Educational qualifications

7. Previous experience

8. Secondary occupation if any
   - ii) Income from the secondary occupation per year

9. Father’s Education
   - Occupation

10. Partner’s Education
   - Occupation

11. Why did you start this unit?
    - i) Profitable
    - ii) Less risk
    - iii) Prior experience in this field
    - iv) Self employment
(v) Traditional occupation of the family  
(vi) Any other specify

12 Location of the unit

Reasons for the present location

(i) Proximity to the market   (ii) Proximity to the Raw materials
(iii) Proximity to the Residence   (iv) Proximity to the Transport
(v) To avail concession for backward region
(vi) Nearness to other similar firms (clusters)

13. Capital: A Fixed capital

i) Fixed capital

Land acquired for the unit
Building and constructions
Value of plant and Machinery
Cost of other fixed installations (infrastructure)

(ii) Changes in the fixed capital during the years 19_______ to 19_______

Land                Depreciation
Building             Other fixed items
Plant and Machinery

(iii) Sources of fixed capital

Savings of own           Ancestral capital
Earning From agriculture From non-agriculture

B. Working capital 19_______ to 19_______

Own                SIDCO
Institutional capital TIIC
Bank               Industrial co-operatives
DIC                Funds from-friends and relatives

(ii) Source of raw materials  (iii) Composition of working capital
Stock of:
   a) Finished goods
   b) Semi finished goods
   c) Raw materials
   d) Fuel
   e) Others

14. Man and Machine

A Machines
   (i) Machinery used: Old model / Modern (Up dated in technology)
   (ii) Own / leased
   (iii) No. of Machines:

<table>
<thead>
<tr>
<th>Name of machines</th>
<th>Number</th>
<th>Age</th>
<th>Capacity</th>
<th>Power required</th>
<th>Operator</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Electricity / Manpower / Animal power</td>
<td></td>
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<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Skilled / Unskilled</td>
<td></td>
</tr>
</tbody>
</table>

   (iv) Total installed capacity

B. Technology adopted
   For _______ Years

C. Capacity utilization:
   i) Installed capacity
   (ii) Capacity utilized
   (iii) Reasons for low capacity utilization
       a) Working Capital
       b) Raw material shortage
       c) Marketing problems
       d) Power problem
       d) Untrained labour
       e) Water problem
       f) Others

15. Production

   i) No. of shifts
      No. of Man days per month:

   Workers per shift:
      No. of Man days per year:

   Approximate output per shift:

   Production:
      Quantity Produced
      Value of Production

   iii) Reasons for low production (if production is low).
iv) Cost of Production

| Raw Material | Labour cost | Cost of power | Depreciation | Others |

vi) Reasons for high cost of Production:
   a) Raw Material  
   b) Labour cost  
   b) Cost of Power  
   c) Others  

16. Manpower

A. Employment:
   i) No. of workers:
      a. Skilled  
      b. Main workers  
      Technical  
      Marginal workers  
      Non-Technical  
      c. Hired labour  
      Unskilled  
      Contract labour  
      Clerical  
      d. Male  
      Others  
      Female  
      Children  
      e. Permanent workers  
      Causal workers  

   ii) How do you employ the workers: Direct Recruitment / through Employment exchange

   iii) Whether labour turnover is a Problem
        If yes give reason?

   iv) Is there any problem of getting skilled labour?

B. Wages and Welfare
   i) Wages   : Piece rate  
   Time rate  

   ii) Whether bonus in paid
        If yes how much - one month salary / two month salary

   iii) Does the organization Provide:
        a) Ex gratia payment  
        b) Overtime salary  
        c) Salary advance

   iv) Are loans and festival bonus provided
v) Other welfare benefits provided.

Free medical aid         Creche
E.S.I. family pension    Common Transport
Gratuity                Retirement benefits

C. Training and development:

(i) What activities of the production requires trained work force?

ii) Whether training is imparted for technical personnel

(iii) Training provided

Internal : External agencies :
Government agency Non-Government agencies
Institutions

iv) Means of training

Workshop.
Meeting and discussions
Mass media – T.V. and Radio
Initial on the – job training

D. Work environment:

Working hours
Whether O.T. is paid
Whether working space is adequate
Whether Ventilation is adequate
Whether Machinery upto date to the standard
Whether lighting is adequate
Whether the temperature is conducive
Whether the noise is minimum
Whether safety measures are adequate
Dust level minimum
Whether updated machines to reduce fatigue
Whether work in out moded machine is compensated

F. Performance appraisal and incentives:
  Whether predetermined standards for performance appraisal
  Whether incentives are available to motivate staff

17. Profit details:
  Gross Profit:
  Net Profit before tax  Net profit after tax

18. Marketing
  Whether product sold on credit
  Whether sufficient demand for the product exist.

ANNEXURE VI

MANPOWER RESOURCE INVENTORY

QUESTIONNAIRE FOR THE WORKERS / ARTISANS

1. Name of the Unit:

2. Nature of employment: Self employed / wage employee

3. Personal details:
   Sex:          Formal training:
   Age:         Experience:
   Education:   (in the present work)
   Source of experience: Traditional / family occupation
                     Formal training institutes
                     Work in other organizations

4. Family:
   Member  Whether dependent  Age  Occupation  Income Per Month
   Spouse
   Mother
Father

Children 1/2/3

Others

5. Income Per Month

Wage Wage (from family members) Agriculture Self employment Others

6. Occupation

Occupation: Permanent / Causal
Secondary occupation if any
Details of secondary occupation including income from it.
Present occupation: Technical / Non-Technical
The present job demands skills / skills not required
Whether possessing the required skill for the job
Whether additional vocational guidance / training required to do the job efficiently.
Whether in possession of agricultural land give details
Whether Agriculture was the occupation prior to this employment.

7. Work

Hours of work per day: No. of days per month per year:
Nature of work: Manual / clerical / other
Whether additional machinery is required to reduce strain
Whether working condition is strenuous – mention the factors
Whether out-moded machine is a draw back for efficient functioning or reduces output

8. Training and Vocational guidance:

Years
Skills gained
Agency involved in training

9. Standard of living

Whether the family is in possession of
a) Own House / Rented house
b) Own Vehicle (specify) / Company vehicle.
c) Savings (specify)
d) Cattle / milch animals / others
e) Land / Size / cultivated land.
f) Whether children are provided with education (give details)