

Leather & Footwear: Innovative Interventions Required

Intervention 1 : Macro Plan to improve Cattle Breeding			
S.No.	Tasks	Key Stakeholder	Innovation
1	<p>Set up breeding farms employing best breeding practices using PPP model with technical collaboration with players from New Zealand, Netherlands, and Syria etc. in big leather clusters like Chennai, Kanpur & Kolkata. Investments to be shared by Department of Animal Husbandry, State Government and Indian investors. The objective of these farms would be to: Create, develop and Disseminate best practices in cattle breeding. The broad activities of this unit will be:</p> <ul style="list-style-type: none"> • Initiate training campaigns inviting foreign experts to demonstrate internationally accepted breeding practices so as to ensure quality of skins & hides of the cattle. All the local cattle breeders need to be invited for these training programmes. • Bring all the privately operating cattle breeders under the supervision of this government aided breeding farm. A separate group to be formed to monitor the performance of these farms and assess the quality of breeding practices. • Provide subsidized veterinary extension services to breeding farms so as to keep the cattle disease free • Assess the impact of breeds and nutrition on the quality of hides and skins. In many cases the value of the hide or skin may constitute a significant proportion of the total value of the animal. Such research data will support extension agents in encouraging people to take care of the hide or skin as a valuable joint product • Promote programmes amongst pastoral communities to improve livestock feeds, upgrade the quality of pasture, and create awareness of the importance and value of hides and skins. 	<p>Department of Animal Husbandry, Ministry of Science & Technology</p>	<p>Knowledge Diffusion and Absorption</p>
Issues Targeted			
<ul style="list-style-type: none"> • Increasing demand supply gap between leather because of declining animal husbandry, leading to increase in prices • Availability issues for high grade leather for leather footwear, apparel & goods industry. 			

References

1. PPPs for Foot-and-Mouth Disease (FMD) Control in Brazil and Bordering Countries

Following the major outbreak in 2000, Brazil eliminated FMD through vaccination in 15 states, comprising 84 percent of its cattle herd, and set a target date of 2006 to be entirely FMD-free (USDA-FAS 2005). Much of this success has been attributed to successful PPPs in animal health programs and to an

ambitious traceability program, known as **SISBOV**, to identify and certify all cattle born in or imported into Brazil.

The SISBOV program began in 2002 to trace the birthplace, production system, movements, vaccination details, sales, and slaughter of all cattle either born in Brazil or imported from foreign countries. SISBOV is implemented through 30 private agencies that have each been certified by the Ministry of Agriculture, Livestock, and Food Supply (USDA-FAS 2005). The SISBOV program is being gradually scaled up in a phased manner; by the end of 2007, all beef produced in Brazil was to fall under the SISBOV program. The cost of the program was funded through a US\$2.50 fee per animal and is expected to cost US\$400 million once fully implemented (USDA-FAS 2002, 2003).

The cattlemen and breeders who want to enter SISBOV must first choose a certifying entity to be registered in the system. The cattleman must inform the certifier about all the events related to each animal: how it was bred, its principal food, supplementary food, vaccines etc. It should also report when the animal dies or is sold. The cattleman identifies the animals according to the individual registration number issued by Sisbov, which should be confirmed later by the certifier by means of a technical visit to the property. Informed of the realization of the identification, Sisbov authorizes the certifier to issue the Animal Identification Document (AID) and issues it to the cattleman. The ID serves as identification for the animal (Normative Instruction 2002). Later, the certifiers send the data collected at the farms to the National Data Base maintained by the Ministry of Agriculture in Brasilia.

After the conclusion of the identification process of the animals, the certifier should make periodic visits to the property, to check and audit the information supplied by the cattleman. The certifier is the faithful provider of the information and will be held accountable by the Ministry for any information about the animals identified.

The government does not determine a single type of identification for the animals. Normative Instruction 21, of April 2004, specifies only that the animals should be properly identified with some combination of earrings, brands, tattoos and electronic devices.

In terms of electronic devices, the Brazilian Company of Agricultural Research (Embrapa) developed a transponder to electronically store the animal's identity. The transponders are small devices with an internal microchip, a coil that can serve as an antenna, and optionally by other devices, such as for example a Global Positioning System for localization by satellite. The transponders are read with another device, called a transceptor or scanner. This device issues radio waves that reach the transponder and trigger the coil, generating a small electric current and activating a microchip. This microchip then responds, also in radio waves, emitting the identification code recorded within it.

Finally, additional PPPs are in place on the marketing side in export markets. Promotion activities are the purview of the Brazilian Beef Processors and Exporters Association (ABIEC), which engages in trade lobbying and marketing in overseas markets and works in conjunction with the export promotion agencies of the Ministry of Agriculture.

2. Beef Quality Assurance Scheme(BQAS) - Ireland

The Beef Quality Assurance Scheme (BQAS) was developed by a Technical Advisory Committee (TAC) representing Board BIA – the Irish Food Board; Teagasc; the Food Safety Authority of Ireland (FSAI); the

Department of Agriculture and Food (DAF); industry (producers and processors) and technical experts. The primary objectives of the Beef Quality Assurance Scheme are:

- To set out the requirements for best practice in beef production at farm level,
- To provide a uniform mechanism for recording and monitoring beef quality assurance criteria on the farm with a view to achieving continuous improvement in production standards,
- To provide a means of demonstrating best practice at producer level,
- To underpin the successful marketing of quality assured beef.

Membership of the Scheme is voluntary and open to all Beef Producers that have a valid Herd Number. Producers seeking membership must initially apply in writing, either directly to the Certification Body (or to Board Bia) using the Application Form provided with this Standard. A separate Producer Declaration Form has to be completed at the audit. The application is then be evaluated and, if appropriate, a full independent audit of the Producer is carried out to evaluate the capability of the applicant to meet all the requirements of the Standard. When the Producer is deemed to have complied with the requirements of the Standard as determined by independent audit, the Producer is considered for certification under the Scheme. When certified, the Producer is issued with a Membership Certificate and listed on a register/database. A BQAS register/database indicating the status of all certified producers is maintained. Board BIA may also seek permission from certified Producers to publish production related data on the database in order to assist Producers to market their beef animals. After the initial successful application, monitoring of Producer's on-going compliance with the requirements of the Standard is carried out by Board BIA or its nominated agents through audit. Each Producer is independently audited at determined intervals. The maximum interval between successive audits is 18 months. Professional Auditors with sectoral experience carries out these audits and a full report is issued to the Producer. Board BIA reserves the right to carry out Audits or Spot Checks on random basis for the purposes of verifying compliance with the requirements of the Standard or to determine that corrective/preventive actions specified during audit are in place. Auditors are entitled to seek access to relevant regulatory reports. The full onus of responsibility for compliance with the requirements of this Producer Standard is on Producers participating in the Scheme and not on Board BIA or its agents or any other third party. All the producers/breeders need to employ the best practices that are mentioned under the following categories in order to get the certification:

- Animal Welfare And Stockman-ship
- Animal Health
- Medicines: Administration, Storage And Disposal
- Visitors And Access Control
- PEST Control
- Animal Nutrition
- Animal Housing
- Animal Transport
- Environmental Protection
- Animal Identification and Traceability
- Animal Remedies
- Animal Feeds and Records
- Clean Livestock Policy

Intervention 2 : Mechanization & Quality Management in Abattoirs			
S.No.	Tasks	Key Stakeholder	Innovation
1	<p>Set up a National Implementing Organization which shall be entrusted with the responsibility of planning, implementing and monitoring the program for mechanization & modernization of abattoirs. The implementing agency need to focus on the following activities:</p> <ul style="list-style-type: none"> • Based on the base-line information of slaughterhouses and slaughter practices, a blue print for modernizing the existing slaughter houses and/or establishing modern slaughterhouses need to be prepared. Then according to the blue-print, the existing slaughterhouses across the country may be modernized / established through Department of Animal Husbandry. On similar lines, Cluster Innovation Centre can be set up within the existing leather clusters that can create a knowledge repository of best practices and modern technology manuals. • Set up technical collaborations with countries like Ethiopia, Brazil and Syria for primary processing of leather for hide removal, evisceration and splitting, deboning, etc. Further, set up joint team of experts to undertake the technology up-gradation in existing abattoirs. This joint team need to be entrusted with responsibility to create oversee diffusion of best practices in all the slaughterhouses. <i>(Technology up-gradation should also emphasize on modern storage facilities for the hides and skins and waste treatment systems. These modern storage facilities shall involve state-of-the-art technologies for green preservation systems.)</i> The Cluster Innovation Centres can act as a networking hub for facilitating technical collaborations with foreign manufacturers. • Prepare a plan to establish modern slaughterhouses across the country based on the animal density and slaughter rate. This can be implemented using PPP models with technology collaboration with foreign players.<i>(Mobile</i> 	Department of Animal Husbandry Ministry of Science & Technology	Knowledge Diffusion and Absorption

	<i>Slaughter house model from New York might also be studied in detail for adoption in Indian context)</i>		
Issues Targeted			
	<ul style="list-style-type: none"> Hand cutting & knife de-skinning being employed in most of the abattoirs leading to quality issues with leather. 		
	<ul style="list-style-type: none"> Availability issues for high grade leather for leather footwear, apparel & goods industry. 		

References:

1. Glynwood Modular Harvest System: Mobile Slaughterhouse Case Study

Glynwood Farm is a sustainably minded farm in Cold Spring, New York that raises a variety of livestock and a few vegetables. They launched a project called MHS project to provide easier access to slaughtering facilities. The MHS is the first USDA approved mobile unit with the capacity for in-unit slaughtering of large animals. The MHS is one of only 5 mobile units for large animals that are licensed by the USDA. It is the first one licensed by the USDA east of New Mexico. With a daily processing estimate of twenty cows, (and a higher estimate for smaller animals), the design is highly efficient. The MHS consists of four modules that combine to form a miniature slaughterhouse.

The specific modules are as follows:

Slaughter Unit: A primary 53-foot trailer providing inside-unit slaughter, carcass preparation, and chilling. Unlike many processing units, this module allows for indoor slaughtering and waste containment.

Refrigeration: A refrigeration truck allowing for railing of quartered sides or carcasses after they are chilled. They can then be delivered to a ‘cut and wrap’ facility according to individual farmer instruction. This unit doubles as a delivery truck, allowing for efficient delivery of meats to a cutting and wrapping facility while the remainder of the MHS remains for further processing.

Waste: A ‘waste or inedible parts’ trailer, meeting hygienic regulations for disposal of offal, manure, and other waste according to municipal requirements. Unlike single units, this option allows the MHS to meet various waste regulations from dock site to dock site.

Office: A small office trailer with amenities meeting USDA requirements and employee needs.

Intervention 3 : Increase competitiveness of Leather Tanning Sector			
S.No.	Tasks	Key Stakeholder	Innovation
1	Set up a National Implementing Agency that shall be entrusted with the responsibility of Planning, implementing and monitoring the program for increasing the competitiveness of the leather tanning sector in India. The tasks that need to be performed by this agency are: <ul style="list-style-type: none"> Prepare a comprehensive information database on technologies pertaining to cleaner technologies, 	Ministry of Science & Technology, Central Leather Research Institute (CLRI)	Knowledge Diffusion and Absorption <i>*Knowledge Creation & Commercialization</i>

	<p>wastewater treatment, odour abatement, solid waste management and Utilization.</p> <ul style="list-style-type: none"> • Demonstration at Pilot scale on selected technologies at different training clusters. • Conduct Workshops and training programs in collaboration with CLRI & NSDC for rural artisans in all the small & big clusters. Through the programs it should be aimed to train the rural artisans in improving the production and quality assurance systems. • Set up a joint sub-group also incorporating experts from countries like Germany, Italy etc. to organize training programs to comply with necessary standards like REACH. The sub-group shall be responsible to conduct plant visits and ensure the adherence of standards. • <i>*Tie-ups with institutions such as SIDBI to provide loans and lower rates with interest subvention for enterprises going for technology adoption from the list of technologies</i> 		
2	<p>Set up mechanism for treating the treated effluent from the tanneries with domestic sewage. (It will decrease the TDS content in the effluent and also help treating the sewage) Various tasks required for the same are:</p> <ul style="list-style-type: none"> • Technical & Infrastructural requirement analysis for the plant. • Pilot can be conducted for the same using PPP model in one of the tanning cluster like Chennai, Kanpur etc. • Commercialize the model. The Tanneries may be charges as per the outflow of effluent from the plant 	<p>Ministry of Science & Technology, Ministry of Environment & Forests</p>	<p>Knowledge Creation & Commercialization</p>
Issues Targeted			
<ul style="list-style-type: none"> • Cost pressures on tanneries due to mandatory effluent treatment plant. This results in increasing cost of finished leather. • Availability issues for high grade leather for leather footwear, apparel & goods industry. • Lack of awareness and knowledge about REACH standards • Inadequate Common Effluent Treatment Plants for tanneries • Inadequacy in the primary treatment done at the tanneries and no monitoring system to measure the TDS level in the effluent 			

References:

1. Eco-efficiency in a Leather Tannery: the Case of Curtigran in Colombia

Curtigran Ltd. is a 13-employee leather tannery situated in the metropolitan district of Bogotá. When faced with increasing environmental legislation, waste water treatment problems, and decreasing productivity and product quality, the company saw eco-efficiency as a strategy which could ensure its survival. In 1994, Curtigran began participation in a pilot project developed by the association for small and medium eco-efficient enterprises in Latin America (PROPEL-- Promoción de la Pequeña Empresa Eco-Eficiente Latinoamericana). PROPEL worked in co-operation with the local tanner’s association (ASOCUR- - Asociacion Curtiembres) and conducted a comprehensive sectoral study before choosing Curtigran as

one of the pilot companies. A cost system and an environmental impact assessment were first implemented in Curtigran. Then with the help of external consultants, expert tanners and a training programme, clean and efficient technologies were developed in-house. The company has since reduced its pollution by 50 per cent, improved the quality of its products and increased its product yield. Curtigran has become a local champion and its success will be used by PROPEL to promote eco-efficiency in tanners across Colombia. The eco-efficiency approach is also now being applied to other sectors such as floriculture and foundries.

Intervention 4 : Set up Modern Waste Recycling Plants to Produce Products such as Bio-Diesel, Soap and Cosmetics			
S.No.	Tasks	Key Stakeholder	Innovation
1	<p>Various tasks needed to set up & commercialize modern waste recycling plants are:</p> <ul style="list-style-type: none"> • Create a database on proven technologies of solid waste recycling. Detailed project reports on those technologies may also be prepared. • Set up a model factory layout for the recycling plant having facility to perform thermo and mechanical processing on fatty meat pieces, scraped from leather in the factories so as to extract water (to be sent back to factories), fat (to be sent for manufacturing of cosmetics, soap & bio-diesel) and protein (to be sent to cattle breeding farms for feeding of cattle) and other possible by-products. • Invite proposals from enterprises willing to set up commercial plants on a PPP model. • Provide technical assistance to the enterprises willing to set up the recycling plants. Technical assistance need to be provided in the form of consultancy for setting up of plant, machinery and technology. • Financial Assistance in terms of tax holidays, subsidy for purchase of technology for a fixed period of 5 years. • Create database of the recyclers and user industries pan India. Further, organize buyer seller meets inviting the recycling companies and user industries of the manufactured products so as to provide ready access to market. 	<p>Ministry of Science & Technology, Department of Industrial Policy & Promotion, Industry Associations</p>	<p>Knowledge Creation & Commercialization</p>
Issues Targeted			
<ul style="list-style-type: none"> • Inadequate industry for recycling of solid effluent • Cost pressures on tanneries due to mandatory effluent treatment plant 			

References:

1. The “Cows to Kilowatts” initiative in Nigeria

The “Cows to Kilowatts” initiative in Nigeria is a partnership project which aims to reduce the water pollution and greenhouse gas emissions from slaughterhouse waste. Building on innovative technology from Thailand, the project converts abattoir waste into household gas and organic fertilizer, providing local communities with clean, cheap fuel.

The solution involved capturing the gas emissions and transforming them into a useful product. They identified relevant technology that had been developed by a **Thai research institution, the Centre for Waste Utilization and Management at King Mongkut University of Technology, Thonburi**. This was based on the use of anaerobic fixed film reactors in the treatment of agro-industrial waste and the production of biogas. By modifying this technology, slaughterhouse waste could be turned into clean household cooking gas plus organic fertilizer.

This approach offered at least three crucial advantages. Firstly, it would minimize water pollution from slaughterhouse waste. Secondly, it would significantly reduce the greenhouse gas emissions generated by the slaughterhouse and/or by the treatment of its waste. Thirdly, it would create valuable biogas by-products.

Implementation Stage I: Building Partnerships

Several organizations have provided key inputs to the project:

- GNEEDR developed the initial project idea, conducted primary research on water pollution, represents the initiative and handles the construction of the plant.
- The Nigerian Centre for Youth, Family and the Law provides legal advice and helps engage local stakeholder groups, such as the local butchers' association and the Bodija market development association.
- The Sustainable Ibadan Project was central to securing the support of the Nigerian government.
- The World Bank's Global Development Marketplace gave an important impetus to the initiative by suggesting the integration of a renewable energy component in its design.
- The Thai research institute was the technology innovator and technical adviser in the design and construction of the bioreactor and in the adaptation of the technology for use with slaughterhouse waste.

Implementation Stage II: Raising Finance

The capital requirements for designing and constructing the waste treatment and biogas plant, as well as for administering the project and consulting with local stakeholders, amounted to around US\$500,000. The project is designed to be commercially viable and plans to sell its household cooking gas at a quarter of current market prices, i.e. US\$7.50 per 25 litres. By producing around 270 cubic meters of compressed biogas a month, the plant would generate returns on investment after two years. With an estimated lifespan of 15 years, the plant is therefore expected to create substantial economic returns. UNDP provided the necessary start-up capital through its Energy and Environment program.

Implementation Stage III: transferring the technology & building the plant

The Biogas Technology Research Centre of Thailand's King Mongkut University of Technology Thonburi had developed an innovative technology for treating agro-industrial waste and generating biogas based on many years of research under an Asian-Australian cooperation program. Through the use of anaerobic fixed film reactors, the institute had achieved much higher treatment efficiency, handling larger quantities of waste and generating high quality biogas at a faster rate than conventional bio-digester

technologies. Prior to the Nigerian initiative, however, the technology had been applied successfully only to treating waste from a rice starch factory and from a fruit canning factory. The Thai institute agreed to work with GNEEDR to adapt its anaerobic fixed film reactor technology for use with slaughterhouse waste. Successful test results showed that the adapted reactor could handle from two to ten kilograms of “chemical oxygen demand” per cubic meter (COD is used as a measure of the amount of organic pollution in wastewater), with a retention time of two to four days. It yielded between 0.4 and 0.5 cubic meters of biogas per kilogram of COD, containing 60 to 70 percent methane. In the Cows to Kilowatts case, the Nigerian Federal Ministry of Environment agreed to receive and transfer the resources to the partnership. This, however, involved a number of bureaucratic hurdles.

Intervention 5 : Foster R&D and Design & Development			
S.No.	Tasks	Key Stakeholder	Innovation
1	<p>Various tasks needed to foster R&D in the industry are:</p> <ul style="list-style-type: none"> • Incorporate a research cell with equal participation of all the industry segments (Tanning, Leather Footwear, Leather Apparel & Goods etc.). There need to be different sub-cells within the body (One to take care of market issues & identify areas for R&D and another one to conduct the research assignments). This would supplement the Building Industrial R&D and Common Research Facilities (BIRD) scheme of DSIR, wherein R&D within the industry is encouraged and supported for ensuring sustainable growth and development in the industry. • Research cell needs to create a database of research projects that need to be undertaken in order to attack the most critical issues faced by the Leather industry. <i>(Some of the prospective areas can be: R&D to make buffalo leather as good as Cow leather, R&D in the area of ultra-thin leather, R&D to enhance the quality of finished leather etc.)</i> • Collaborate with foreign research laboratories who are pioneers for the identify research projects to source technological know-how and research support. • Conduct knowledge management workshops inviting all the industry stakeholders and make them aware about the new research technologies and impact of the same on firm’s productivity. • Arrange for financial assistance for commercialization of research work by the industry. This can be done through bodies like SIDBI wherein loans are provided at lower rates with interest subvention for a fixed period. Further financial incentives can be provided to set up In-house Design &Development Laboratory equipped with CAD-CAM, Design tools and equipment (hardware & software) purchase, design experts, Mould making & designing, Embellishments & decorative fillings, and rapid prototyping etc. 	<p>Ministry of Science & Technology, CLRI, Ministry of Finance</p>	<p>Knowledge Creation & Commercialization</p>

Issues Targeted	
<ul style="list-style-type: none"> • Availability of cow leather is an issue because of religious sentiments, therefore impacting production. • Availability issues with high grade leather • Limited value addition in the industry because of lack of investments in Research & design development. • Lack of awareness on quality norms & standards 	

Intervention 6 : Measures to improve labour skills & productivity			
S.No.	Tasks	Key Stakeholder	Innovation
1	Set up a mechanism so as to enable NSDC to work in tandem with Ministry of Rural development so that NREGA scheme is utilized to fill the skill gaps in the industry. Various Tasks that need to be performed are: <ul style="list-style-type: none"> • NSDC can identify the key skill gaps in the leather & footwear industry and train the people availing NREGA scheme so as to make them employable in the industry. For training purpose, people from industry need to be invited. • Set up placement councils in various clusters to maintain the details of all the people trained in the various areas so that industry can approach the council for employment required for employing the desired skills 	Ministry of Rural Development, NSDC, CLRI	Knowledge Diffusion and Absorption
2	Set up secondary training centres on a PPP model in the existing as well as developing leather clusters to cover skill up-gradation training of those already involved in shop-floor operations in both organized and unorganized sector of the leather industry	Ministry of MSME, NSDC, CLRI	Knowledge Diffusion and Absorption
Issues Targeted			
<ul style="list-style-type: none"> • Lack of skilled people in the areas of dyeing, tailors, cutters & skilled master. • Hand cutting & knife de-skinning being employed in most of the abattoirs leading to quality issues with leather. • Decline in new labour force(unskilled or semi-skilled) entering the industry 			

Intervention 7: Fostering demand & Improving Market Access			
S.No.	Tasks	Key Stakeholder	Innovation
1	Various schemes need to be undertaken so as to foster demand in domestic market. These are: <ul style="list-style-type: none"> • Ensuring strict implementation norms for leather safety shoes/gloves etc. in all the relevant industries so that domestic demand of these shoes can go up. A strict policy on periodic replacement of old safety gear needs to be implemented. • Implementation of local procurement policy for all the leather safety gear in Indian PSU's • Incentives for deemed exporters of finished leather who 	Ministry of Heavy Industries & Public Enterprises, Ministry of Finance	Knowledge Creation and Commercialization

	are supplying to domestic manufacturers of finished goods like Leather Footwear & Goods		
2	<p>In order to improve the market access, awareness level in small & medium enterprises need to go up. This can be done by:</p> <ul style="list-style-type: none"> • Setting up a liaising agency (centre) in existing as well as developing clusters as a separate profit centre. • The agency should be entrusted with the following responsibilities: <ul style="list-style-type: none"> • Conduct awareness programmes to appraise the enterprises about existing schemes as subsidies. • Provide documentation support for availing the schemes & subsidies. • Liaison with relevant government bodies and banks for sanction of schemes & subsidies. <p><i>All of the mentioned services should be provided on payment basis.</i></p> <p>The CICs within the cluster can serve as the nodal agency for carrying out above activities.</p>	Ministry of Finance, Ministry of MSME	Knowledge Creation and Commercialization
3	<p>Countries which have huge market opportunities for Indian Leather & Footwear sector need to be examined for having Free Trade Agreements (FTAs) or Comprehensive Economic Cooperation Agreements to provide better access to Indian players in these countries. Some of the prospective countries which can be considered :</p> <p>USA, ASEAN , EU, Brazil, Japan, Indonesia.</p>	Ministry of External Affairs	
Issues Targeted			
<ul style="list-style-type: none"> • Lack of awareness about government schemes & subsidies within MSMEs. • Shrinking export markets impacting profitability of the industry 			

Intervention 8 : Set up certification mark for Indian Leather & Leather Products			
S.No.	Tasks	Key Stakeholder	Innovation

1	<ul style="list-style-type: none"> • Create an 'Indian Leather Mark' that will standardize Indian Products making them Competitive in the Domestic as well as Global Markets. • Development of a "quality manual and accreditation scheme" which defines the quality standards which applicants will be required to meet in order to be accepted in the program and for use of the 'Indian Leather Mark'. • Establish an agency which would ensure the creation of database of all the companies in various levels of the value chain (Can be done with collaboration from Ministry of MSME, CLE, and NSIC etc.). This agency need to undertake training programs so that technological know-how and awareness is provided to enterprises willing to go for the 'Indian Leather Mark' certification • Develop a scheme through which 'Indian Leather Mark' can be awarded to Domestic companies based on their performance and standing across pre-set criteria such as capacity, technology, manufacturing excellence, packaging, sales and customer satisfaction etc. on a co-payment basis 	Ministry of Science & Technology, CLRI	Knowledge Diffusion and Absorption
Issues Targeted			
<ul style="list-style-type: none"> • Inadequate testing & certifying agencies in India. • Lack of awareness on quality norms and standards. • Non-acceptance of goods by the buyer because of quality issues • Issues in adhering to the external legislative requirements in EU & US markets 			

References:

1. Project 'Turquality' - Turkey

Curtigran Ltd. is Turkish Government undertook a project called 'Turquality', an accreditation system for the product groups with brand potential to upgrade the perception of products made in Turkey. The Turquality program mainly consists of two complementing activities. On one side, there is the development of a "quality manual and accreditation scheme" which defines the quality standards which applicants will be required to meet in order to be accepted in the program and for use of the Turquality logo and brand. On the other side, an articulated auditing program is currently being implemented with the aim to "benchmark" Turkish companies with international best practices. The aim was ' a national branding strategy', to bring world class standards and best practices to Turkish industries , to brand Turkey itself, so the perception can be created on a global scale, that it is a place where fashion and brand creativity is a reality, to communicate the above to the global market. The purpose is to provide each participating company with a dynamic tool to identify its weakness areas in the path towards excellence.

The Turquality Program seeks to improve the image and respectability of Turkish products generally through subjecting applicants to quality assurance evaluations. In the event applicants receive the coveted Turquality logo, the Turkish government may provide subsidies of up to US\$ 5,00,000 for marketing and

distribution; and US\$ 3,00,000 for design and development. "Turquality program, aims to create 10 world brands in Turkey within 10 years, and is much more than a branding program".

To support selected Turkish brands in a systematic way covering all the operational processes, to furnish training, consultancy and coaching to the best companies of Turkey for global competition, this program takes on a mission to subject the companies to a group of training, consultancy and coaching processes in order to support the achievement of such companies in international markets. By means of a study which will be carried out simultaneously with the services in the first level the companies shall be evaluated in comparison of their weaknesses and strengths on the basis of their commitment for becoming a brand besides their operational and managerial activities.

The operational activities observed in evaluation phase shall be examined under following primary headlines: Supply Chain Management, Customer Relations Management (CRM), Organizational Structure and Human Resources, Institutionalism, Finance, Information Technologies, Brand Management

By means of this study the candidate companies promising the most powerful potential for being champions in terms of developing world's brand shall be selected; and an opportunity to take the advantage of a serial of support initiatives in advanced level shall be granted to such companies. The above branding strategy has been successful and today more and more Turkish companies are coming on to the global map. A similar national branding strategy should be adopted by an authorized body aiming to create Indian brands with world class practices and quality products. The perfect mix of government support and adoption of best business practices will help Indian brands to deliver the best to the market.

Intervention 9 : Provide database & technology support to domestic firms			
S.No.	Framework for Innovation	Key Stakeholder	Innovation
1	<p>Provide database & technology support to domestic firms in the following areas:</p> <ul style="list-style-type: none"> • Quality standards followed globally for various components & products. • Technology- and innovation-related international journals from major publishers; manuals on best practices and modern technology • Comprehensive information database on technologies pertaining to cleaner technologies, wastewater treatment, odour abatement, solid waste management and Utilization • Database on proven technologies of solid waste recycling. Detailed project reports on those technologies may also be prepared. • Database of research projects that can be undertaken to solve most critical issues faced by the Leather industry • Database of industry experts (either retired or from the industry) who can be contacted by domestic firms for any kind of technical support required. For the same, profiles of the experts need to be invited and kept in a repository. On receipt of any request from the industry, communication can be sent to the relevant experts and the interested one's can then be suggested to the requestor.. 	Ministry of Science & Technology	Knowledge Diffusion and Absorption
Issues Targeted			
<ul style="list-style-type: none"> • Lack of awareness on global standards for among domestic firms • Limited government support for R&D. 			