CULTURAL INDUSTRIES SECTOR

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1. Definition and Scope

The scope covers the craft industry as a manufacturing component of the broader Cultural Industry (CI). This would include rural and urban craft producers as well as their interface with the retail market and enabling technologies in the sector.

Considering the low technology base of the craft industry and its high labour intensity, our reference to an advanced manufacturing strategy is relative to, and in the context of, the existing state of the industry.

2. Methodology

The process was as follows:

- A dipstick trend analysis of the South African industry was conducted.
- A series of interviews and discussion workshops were held with key industry stakeholders.
- Current and previous Cultural Industry strategic initiatives were reviewed and/or revisited in relation to the terms of reference of the Advanced Manufacturing and Logistics Technology Strategy.
- An initial strategy discussion framework was agreed which included a situational analysis, SWOT analysis, strategic alignment, impact analysis, dipstick gap analysis and technological development opportunities.
- A Broad Stakeholders workshop was held in August 2002 in order to agree on a strategic approach including all stakeholders and to obtain further inputs as a basis for second-phase strategic development.

3. Synopsis of Industry Background

- CI is a major source of income for rural communities and makes a significant contribution to employment and economic growth.

- CI involves communities with limited access to capital, technology and resources.

- It is a highly creative sector producing traditional craft and functional wares for the informal and formal retail market.

- The craft sector is associated with traditionally low-skilled and dispersed activities with limited economic impact.

- The statistical data on the CI industry are not very reliable but a recent assessment places employment levels at 200 000 people (DACST Craft Sector Study, 1998).

- CI growth and development is a national imperative and requires innovative strategic thinking around leveraging its manufacturing capability and global competitiveness.

- R&D and technology investment in CI are non-existent.

- Poor human resource development (HRD) and technical skills levels.

- Craft is a highly localised segment of the domestic and tourism markets.

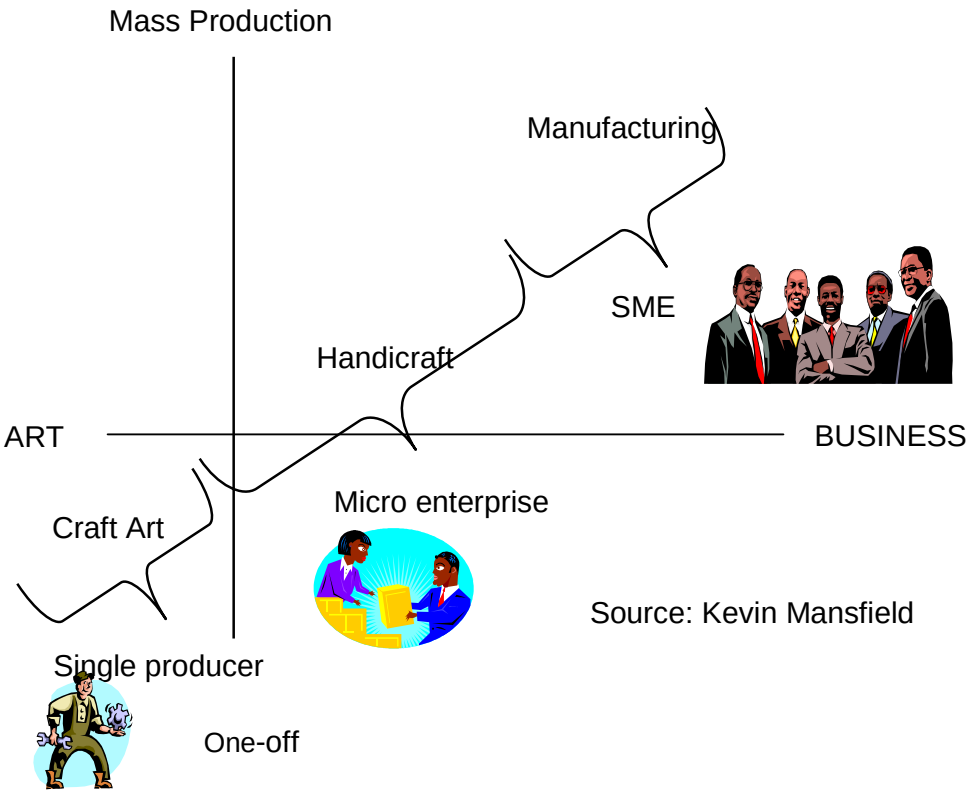
- Developing countries develop significant export trade in handicrafts. In India, the Philippines and Thailand it is a significant source of foreign exchange earnings despite modest investment.

- There is a great demand for South African storytelling and style.

- There is an acknowledged resourcefulness of South Africa’s craft producers.

- There is little restrictive legislation and good support is given by government and international agencies.

CRAFT OVERVIEW



4. Current Reality

4.1. Cultural and Indigenous Values

- South Africa's rich cultural diversity and heritage provides a unique and vast resource for developing craft products.
- Craft producers are not always able to balance the commercial value with the authenticity of cultural heritage and the indigenous value of the product.
- There is a failure to acknowledge intellectual property rights and to preserve the indigenous knowledge that resides in communities.

4.2. Marketing

- The South African market is flooded with cheap imports due to a highly price-sensitive market and the inability of South African craft producers to compete on price, quality and service delivery.

- The craft industry places a strong emphasis on originality, and its combination of utilitarian and decorative functions commands a high value. Because the discerning market rejects overtly commercial products, it does not significantly create employment opportunities in this particular craft segment.
- A very small percentage of turnover at local retail outlets accrue to local producers due to poor quality, unreliability of supply, uncompetitive pricing, technical incompetence and poor product design.
- Inability to successfully integrate appropriate craft products, with their South African uniqueness, into the growing tourism sector.
- Relatively poor promotion of South African craft as a branded product.
- South African craft is not capitalising on the opportunities created through AGOA and EU initiatives.
- Inaccurate and unrealistic price determination unrelated to market forces - severe lack of marketing intelligence.
- Rural and peri-urban producers' vulnerability to domestic market cycles and dependency syndrome leading to disempowerment.
- Limited access to growth-sustaining markets and capital.
- Gross exploitation of craft producers by unscrupulous intermediary market players.
- Over-reliance on seasonal and highly variable tourism markets.
- Disappearance of handicraft skills due to excessive commercialisation and resultant loss of differentiated South African characteristics.

4.3. Supply Chain

- The high non-value-added activities along the value chain and poor technological applications and inadequate supply chain management reduce the sector's commercial viability and economic sustainability.
- The craft industry is highly fragmented and characterised by informal systems and processes operating at subsistence levels.
- Lack of profitable execution of orders.
- Uncoordinated approach and improper communication networks – inability to intercept opportunities.
- Unreliable information database of producers.
- Weak global links.

4.4. Production Technology

- Evident lack of research in appropriate micro-survivalist technologies in key craft sectors such as ceramics, papermaking, beadwork and textiles.
- Lack of technology support.
- Inability to measure capacities or failure to collaborate resources to create economy of scale.
- Evident lack of appropriate systems and procedures to enhance labour productivity.
- Abnormally high labour-intensive operations not complimented by simplified methodologies and design.

4.5. Product Technology

- Poor product design and informal technical applications.
- Poor product quality and low productivity levels.
- Duplication of products with no clearly differentiated, value-added properties.
- Lack of exposure to new design trends and basic technology applications and methodology.
- Lack of understanding of the role of product designers and development.
- Lack of R&D and appropriate craft training programmes.
- Unrealised potential on a large scale.
- Failure to involve creative talents of the community into product designs.

4.6. Materials Technology

- Poor materials research in ceramics and natural paper-based materials – low melting temperature metals.
- Lack of materials testing and performance measurements.
- Inconsistencies in the use of natural dyes negatively affect their commercial value.

4.7. Infrastructure Support

- Inappropriate energy supply source in rural communities.
- Abnormally high costs of sourcing and accessing raw materials, e.g. fabrics and beads – decline of local sources.

- Inaccessibility to markets and suppliers due to poor roads, transportation and telecommunications in rural areas.

4.8. Capital

- High costs of capital equipment due to lack of and/or access to financial resources.

4.9. Structure

- Lack of role clarification within CI sector: retail or wholesale service provision?
- Poor coordination and direction.
- Serious fragmentation between role-players.
- Ineffectual networks and alliances.
- Failure to involve communities in strategy formulation.
- Unilateral approach adopting European and USA models for South African situation.

4.10. Training and Skills Development

- Inappropriate training material.
- Inadequately trained service providers.
- Lack of capacity and skills development.
- Inherited methodologies and informal applications.

5. Relevance of Change and its Implications

- Enhancing SMME competitiveness in domestic and global markets.
- Employment growth and poverty alleviation.
- Building capacity and development of skills base.
- Creative skills in design and execution of design are critical.
- Interpretation of design reference and converting it to a viable commercial product.
- A global view of current fashion, interior design, product design, etc. is required. A change from curio sales as the focus to original craft for rural roadside initiatives (currently not their own work but mass-crafted North African work).
- Integration of poor communities into mainstream economy.
- Increased responsiveness to market demand through integrated process methodologies.
- Introducing effective and affordable technological solutions to optimise performance and create sustainability in CI environment.
- Support technologies to improve manufacturing capability.
- Meeting and exceeding market expectations.
- Strengthening the network of local partnerships to leverage marketing opportunities.
- Balancing uniqueness of indigenous value and cultural heritage with commercial value of product.
- Appropriate replicable models and simulation capability.

- Reducing the digital divide. This may not be relevant except to gain global design reference – a poor marketing tool – not required for design or manufacture.

6. Positive Outcomes of Strategic Initiatives

The support of DAC and Provincial Governments has resulted in the Following:

6.1. Establishment of Cape Craft and Design Institute (CCDI)

- Promoting partnerships in support of the development of small craft businesses.
- Appropriate interventions to five diverse craft businesses through a craft industry development lead project.
- Promoting networking and information dissemination: includes craft forums and seminars, database mapping, events participation.
- Research, design education and training: building real partnerships between TEIs and industry sector.
- Institutional product development programmes for commercial purposes.
- Facilitating craft producers' access to markets (trade exhibitions).

6.2. Establishment of National Product Development Centre (NPDC)

- Supporting global competitiveness of manufacturing industry through the application of integrated rapid project development technologies and methodologies.
- IP and IK protection and innovation exploitation.
- Essential services provided in design support, materials engineering, production tooling and prototyping.

6.3. Lubombo Spatial Development Initiative

- Promoting economic growth with a tourism focus.
- Infrastructure development.
- ‘Community’-driven product development capturing real knowledge and heritage.
- Creating an awareness of social and institutional dynamics.

6.4. National Craft Council Initiative of a National Craft Development Initiative

- Providing crafters with access to local and international markets.
- Promoting sustainable employment and wealth creation.
- Trade exhibitions to attract local and international buyers.
- Relevant and specialised training in product development alongside trade fairs.
- National marketing programme to promote South African craft.
- Promote national branding.

6.5. Technikon Initiatives

- PE Technikon ceramics project in red clay as a poverty alleviation project.
- Wits Technikon's hand papermaking poverty relief programme.
- Developing appropriate technologies to recycle natural resources into paper products.
- Creating employment opportunities.
- Other partners include the CSIR, the ARC, Working for Water, MDA and UNDP.
- M L Sultan's HIV/AIDS rural craft initiative using visual aids to transfer knowledge of HIV/AIDS to rural women with craft skills.

6.6. Khumbula Zulu Craft Initiative

- Launch of products into the international market [LOSA].
- KZN and Mpumalanga poverty alleviation project.

6.7. Little Elephant Project in Mpumalanga

- Market access and facilitation.
- Producer collaboration partnerships.
- Access to tourism.

6.8. Indigenous Cuisine Project in Mpumalanga

- Promoting cultural tradition and heritage.
- Holistic approach to cultural diversity.

6.9. Establishment of the Cultural Industries Design Unit (CSIR)

- Leading cultural industry design nationally through quality and excellence.
- Preserving and activating heritage skills and indigenous knowledge for economic gain.
- Providing innovation through creative product solutions.

6.10. Mineworkers Development Agency

- Central buying agency and integrated distribution network of craft product.
- Research in diverse product application.
- Masula project: use of indigenous resources to create jobs.

6.11. Bat Centre KZN

- Promoting quality of product.
- Promoting partnership and collaboration.
- Market-driven product development.

7. Gaps and Opportunities

- Reduction of production lead times and promoting ease of manufacture to fast track product to market.

- Increasing market demand for authentic, exclusive and high-value African handcrafted quality products.

- CI clusters with specialised capacities in particular locations that differentiate product - developing of unique critical mass of indigenous skills, expertise and supplies that make the South African cultural industry the innovative centre of Africa.

- Evolving technologies that suit particular customer needs – strategy to be consistent with structural evolution of CI industry in terms of uniqueness in originality and authenticity of product.

- Creating a learning environment conducive to change in the exploitation of opportunities in the market.

- Improvement of operational effectiveness through appropriate technology intervention.

- Increasing focus on technical training and skills development and transfer.

- Establishing economic clustering through which small producers can cooperate to achieve economies of scale – CRITICAL.

- Development of a basic electronic environment linked to a website for trade purposes – e-commerce solutions at entry levels to marketing, production and administration functions.

- Promotion of recycled waste materials as a valuable cost-effective input resource through proper research and testing methods – ensure waste minimisation, product durability and reliability.

- Process development and optimisation through introduction of appropriate support technologies and the adaptation of basic industrial-based technologies, e.g. jewellery findings – through low-cost hand-operated tools.

- Appropriate linkages with formal retail mainstream market and tourism both locally and internationally.

- Balancing creative talents of producers with qualified artists to ensure retention of skills within communities.

- Consolidation of public/private partnership networks with CI stakeholders.

- Replicable modelling and technologies where appropriate.

- Creating a paradigm based on innovation and upgrading.

- Optimisation of supply chain link.

- Increased research and design capacity.

- Empowerment of community to become self-sustainable.

- IP benefiting originators.

- Global network linkages.

- Increase local demand and consumption for locally produced craft products.

- Government support to introduce craft skills into school curriculum.

- Appropriate tax incentives for CI industry support agencies and/or organisations.

8. Critical Success Factors

- Securing industry support.
- Securing adequate funding.
- Development of integrated technology systems.
- Development of policy support systems and an institutional framework.
- Securing cooperation and integrated support of specialised clusters of craft producers and retailers.
- Application of a long-term R&D strategy.
- Stable legislative and regulatory environment.
- Collaborative partnerships and alliances.

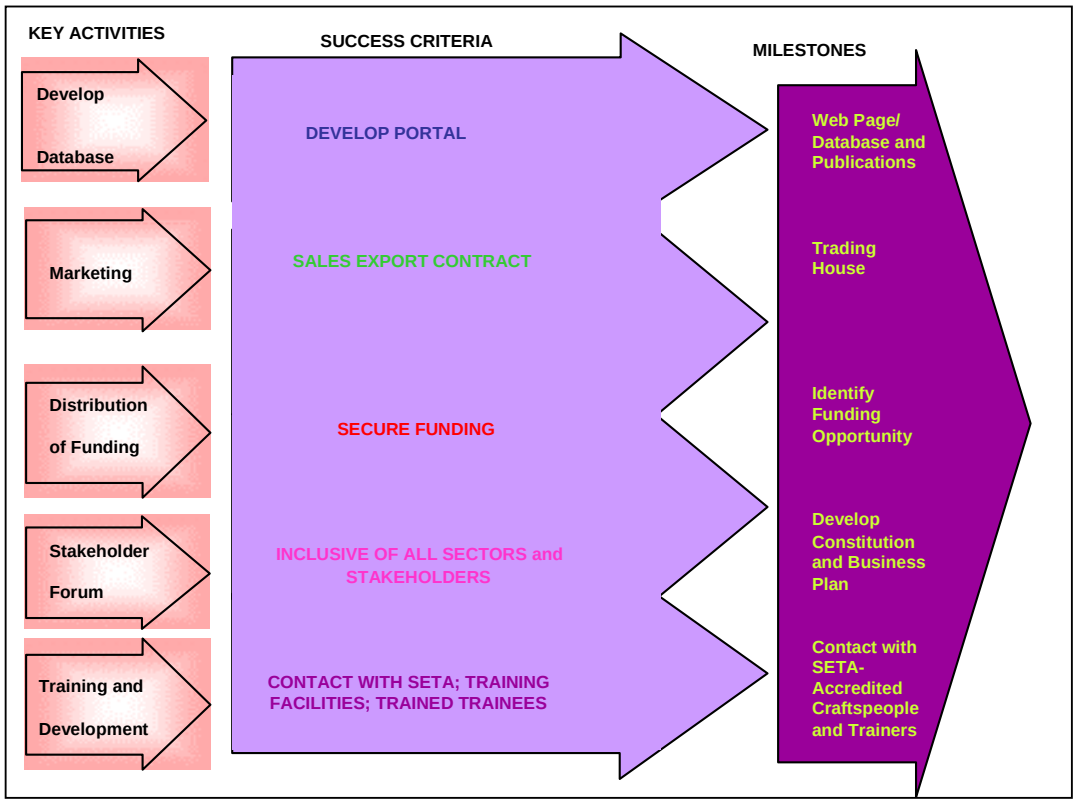
9. Recommended Strategic Initiatives

The key strategic initiatives proposed by the majority of stakeholders are the following:

- National Craft Development Agency
- Network Centres of Excellence
- National Craft Development Agency (NCDA)

The primary objective is to create an enabling environment that will enhance the global competitiveness of the South African cultural industry sector. The focus will be on the establishment of an effective institutional environment based on collaborative partnerships and linkages between key stakeholders in the industry. The emphasis will be on poverty alleviation, wealth creation, capacity development and sector performance improvement. The NCDA's key role is to coordinate the national effort in the cultural industry sector.

9.1. National Craft Development Agency



ESTABLISHMENT STATUS	NAME OF ORGANISATION
New	**National Craft Development Agency**

PRIMARY OUTPUT (OUTCOME)

- Building appropriate partnerships that will enable the sector to significantly contribute to economic wealth and employment growth.
- Developing the value chain capability of the sector that will enhance the sector's global competitiveness and create sustainable opportunities.
- Design education for sustainable development.
- Establishment of a Network Centre of Excellence.

STRATEGIC OBJECTIVES

- Alignment with national priorities of poverty alleviation, crime prevention, human capital development, urban renewal, HIV/AIDS programmes.
- Maintaining and building capacity in R&D.
- Leveraging national and international funding for strategic initiatives.
- Implementing national cultural industry strategy and programmes.
- Focusing on development and commercialisation initiatives in the craft sector.
- Integrated national programme strategy to enhance competitiveness of the CI sector.
- Building national and regional networks and capacity.

KEY ENABLING OUTPUTS

- Consolidation of current initiatives and replication of successful, implementable development models for the sector.
- Focused and goal-directed projects and programmes at regional levels that integrate and align with national priorities.
- Preservation of IK and National Living Treasures.
- Craft producer interface with mainstream economy.
- Accredited training programmes in line with SETA.
- Proudly South African accredited products.
- Technology and skills transfer.

METHODOLOGY

- Develop structure for a National Craft Development Agency in consultation with all stakeholders.
- Develop a business plan detailing developmental and commercialisation initiatives.
- Incorporate appropriate institutional capacities to ensure effective implementation and monitoring of Integrated Programme for Craft Development.
- Submit proposals for funding.

MEASURABLE OUTCOMES
• Network Centre of Excellence focused on improving sector performance and innovative technological solutions for industry. • See Technology Intervention Strategies below. • Accredited training and development programmes. • National database of accredited service providers.
DURATION
One year for development and set-up One year to commercialise national programme.

9.2. Network Centres of Excellence

These will build on the current institutional capacity and strategic initiatives that emphasise innovation, creativity and performance excellence.

Through collaborative partnerships, they will position the South African craft industry in the global supply chain, benchmarking against global best practices.

Finally, through focused and multi-disciplinary research and technological innovation, they will promote capacity and skills development to enhance the quality of life of the people of South Africa.

Key focus areas include:

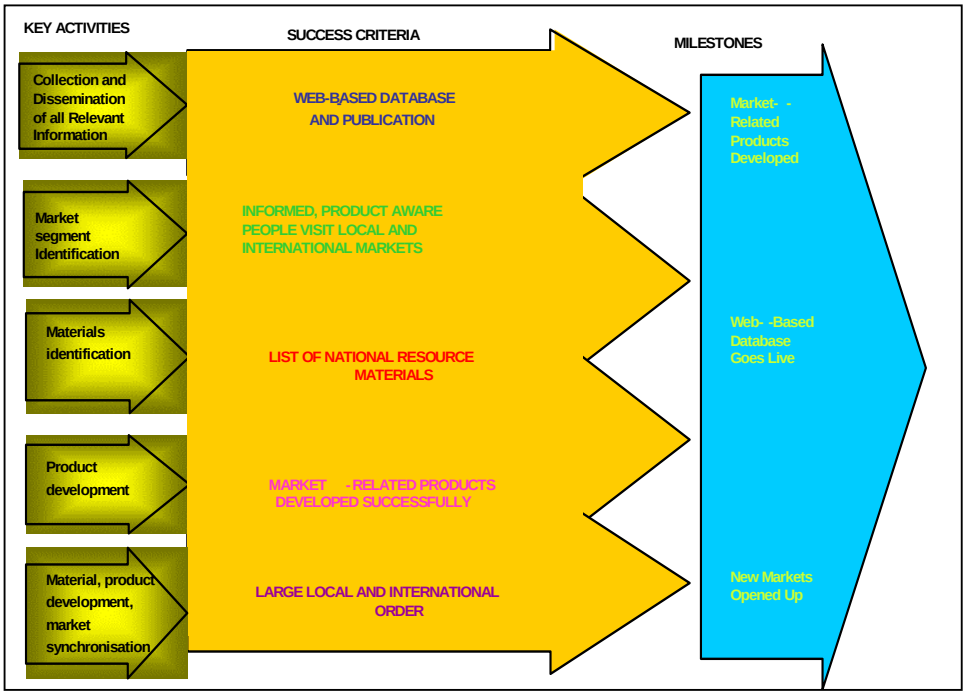
- Advanced manufacturing technology initiatives such as advanced materials research, product and process technologies, supply chain management, information and communications technology, and cleaner production technologies.
- Marketing and business development of the cultural industry in the SMME sector through appropriate supply-side and demand-side measures.
- Promoting the rich cultural heritage and indigenous values of the craft sector.
- Contributing to the growth and sustainable access of South African products to global markets.

The National Network of Clusters of Centres of Excellence will include:

- Tertiary institutions
- Research institutions
- NGOs

- Private/public sector partnerships

Network Centre of Excellence:



9.3. Market analysis and business development linkages

The focus of this initiative is a review of the domestic and international markets to analyse opportunities for the cultural industry SMME sector to meet the needs of these markets. Orders received must be appropriate to the scope and magnitude of CI SMMEs to meet market demand. Business linkages will be pursued with CI SMMEs that have the capacity to fulfil both local and international demand. Within that mandate, the following areas need to be assessed:

- Market dynamics and distribution channels.
- Market demand and appropriate placement.

ESTABLISHMENT STATUS New and existing	NAME OF ORGANISATION National Craft Development Agency MDA Trading House/ Virtual Factory

PRIMARY OUTPUT (OUTCOME)

Build market intelligence for the trading house or sourcing entity to assist SMMEs through a skills-based assessment to accurately place orders. Improve efficiency in meeting the demands of the market through appropriate business linkages.

HOW WILL PRIMARY OUTPUT BE USED AND BY WHOM?

The information gained will assist the trading house and sourcing operations to obtain business suited to market conditions within the SME manufacturing environment. SME businesses will be able to gain global access while consolidating their domestic market and improving their production capacities to meet demand.

ENABLING OUTPUTS

- Establish business development linkage team to address market opportunity.
- Qualify all potential business leads with retailers and marketers.
- Oversee the quality control of the SME production process.
- Negotiate business deals and terms of reference with buyers and suppliers.
- Build market intelligence with a market focus that is acceptable to an SMME producer's capability.

METHODOLOGY

- Assign task team to trading house comprised of stakeholders to work together to manage this aspect and perform assessment.
- Select 30 SMMEs as participants in a pilot programme.
- Pre-implementation audit to establish the appropriate marketing channel.
- Accurately map the production capabilities and order fulfilment capacity of each SMME operation in this pilot.
- Document the production practice quality capabilities of each SMME in the pilot for the following:
  - Dealing with management functions affecting quality system.
  - Organisational structure, resources, responsibilities, procedures, processes and decision-making
  - Contract review - review tender and contract/order requirements - shipping, etc.
  - Design controls - establish and control the functions of design and production planning.
  - Document and data control - coordinate system ensuring appropriate documents are available, identification, origination, etc. for administration business unit.
  - Purchasing – coordination and control of purchased products to be manufactured.

- Process controls - needed in manufacturing operations.
- SMME inspection for sample-making and testing procedures – marketing will confirm via Sample-Making Business unit.

- Develop an action plan with outputs and target dates for implementation of business linkages.
- Marketing - accreditation of both SMME quality system and products.

DURATION

Year one: market development

Year two: establishment of trading house to e-trading

9.4. Advanced Materials Technology

ESTABLISHMENT STATUS **Existing institutions**	**NAMES OF ORGANISATION(S):** **CSIR** **Durban Institute of Technology** **NRF** **Port Elizabeth Technikon** **SABS** **Wits Technikon**

PRIMARY OUTPUT (OUTCOME)

- Combine new and innovative materials.
- Enhance properties of existing and recycled materials.
- Introduce advanced material application including light and temperature-sensitive materials.
- Introduce smart materials and non-composites (textiles).

KEY STRATEGIC OBJECTIVES

- Differentiate local craft products through innovative and new material combinations.
- Improve product quality in terms of reliability and durability.
- Maintain the cultural value of the product by combining indigenous and advanced techniques.
- Create understanding of materials process specifications and reactions through appropriate testing methods, especially amongst rural crafters.

KEY ENABLING OUTPUTS

- Develop advanced materials for textile-based craft.
- In selected textile craft markets, introduce smart materials, high-performance textiles, composite textiles and biodegradable textiles.
- Effective use of natural fibres.
- High-temperature inorganic colour pigments in glazes.
- Appropriate testing methodologies for high-density ceramic products.
- Research methodologies to enhance the properties of recycled waste materials for paper manufacturing.
- Develop micro-survivalist materials technology for rural communities.
- Produce recipes for chemical compositions.

METHODOLOGY

- Establish an integrated research and development task team comprising experts from industry, TEIs and research organisations.
- Conduct audit and dipstick assessment for current research initiatives and present findings.
- Select appropriate marketable craft products of high earning potential for selected materials research and development.
- Adapt material properties and design to local market demand.
- Implement appropriate advanced materials technology in a pilot group of craft producers.
- Document the material quality capabilities of each SMME in the pilot.

MEASURABLE OUTCOMES:

- Improve quality of clay in rural communities by 20%.
- Improve the properties of materials in five craft segments: ceramics, basketry, textiles, paper craft and wood.
- Employment creation for 100 ceramists over two years.

DURATION

Three years

9.5. Product technology: development and improvement

ESTABLISHMENT STATUS:	NAMES OF ORGANISATION(S):
Existing Institutions	**BAT Centre** **Cultural and Craft Innovation Design Unit** **Cape Craft Design Institute** **Design Institute of Fashion in South Africa (DIFSA)** **National Product Development Centre** **NRF** **SABS Design Institute** **TEI R&D Units**

PRIMARY OUTPUT (OUTCOME)

- Through the fusion of traditional and modern product development approaches and applications, produce distinctive craft products that capture local heritage and knowledge.
- Higher premium on quality at the start of the value chain process.

KEY STRATEGIC OBJECTIVES

- Align product development programme with Integrated Manufacturing Strategy and R&D Strategy for craft sector.
- Position South Africa as relevant in the cultural sector of global product design.
- Invest in the medium and long term in R&D competencies and facilities in a network of design centres of excellence.
- Establish and maintain knowledge repositories on traditional product and process technologies, capturing local knowledge and cultural heritage from master crafters.
- Developing a multi-disciplinary and integrated craft design education curriculum for tertiary schools.

ENABLING OUTPUTS

- Access advanced design capabilities, e.g. CAD.
- Development of drying and storage processes for wood products.
- Adapt product to combine cultural with commercial value.
- Technology development for testing of different chemical dies and colours for sisal, reeds, etc.
- Improve the quality of materials and firing processes for ceramic/pottery products.
- Develop a moulding process as a substitute for coiling in the ceramic process.
- Through new product technology applications, i.e. appropriate equipment, sensing technologies and computerisation, revive indigenous games.
- Augment technologies for cultural industry to improve labour productivity levels in high-labour-intensive craft market.
- 3D technology software packages/systems that integrate both artistic and engineering

capabilities, especially for distinctive jewellery and packaging industries. • Introduce potting wheel to reduce non-value-added physical effort in pottery production. • Introduce renewable source of energy in rural communities where it will enhance production processes.
METHODOLOGY • Form product technology task team comprised of relevant stakeholders. • Capture findings of product development and research and prioritise according to segments of the craft industry. • Audit and evaluate product designs and process specifications of products. • Agree on standardisation of product definition and data exchange.
MEASURABLE OUTCOMES • 20% growth in domestic market and 20% increase in export revenues within three years as a result of innovative product technologies. • Obtaining favourable margins of 30 - 50% for domestic craft producers due to higher value-added products. • Employment growth of 10% in rural communities over three years. • Creation of 20 business linkages between rural craft clusters and private sector within one year.
DURATION: Three years

9.6. Production Technology

ESTABLISHMENT STATUS **New an existing**	**NAMES OF ORGANISATIONS:** **Durban Institute of Technology Enterprise Development Centre** **Mining Development Agency National Private sector companies** **Product Development Centre** **SABS**
PRIMARY OUTPUT (OUTCOME) • Improving labour productivity in a highly labour-intensive and price-competitive industry. • Balancing the cultural value of products with their commercial value to sustain business opportunities. • Due to high non-value-added activities impacting on value chain, low-cost production methods are vital to sustain small businesses in the craft sector. • Value creation in value chain. • Globally competitive craft industry.	

KEY STRATEGIC OBJECTIVES

- Creation of employment opportunities through the development of sustainable business enterprises.
- High-quality products that are globally competitive.
- Reduction of production lead times in value chain to respond quicker to markets.
- Development of the capacity and capability of the craft producers in a cutthroat, price-sensitive market.

ENABLING OUTPUTS

- Introduction of proven manufacturing philosophies and methodologies:
- Agile manufacturing: rapid prototyping and reverse engineering technologies for customised production of low volume and high value.
- Lean manufacturing: introducing the Seven Wastes of oversupply, non-value-added motion activities, ineffective delays, unnecessary process applications, defects, illogical material flows.
- Sequential production: greater operator accountability for quality and costs of product.

METHODOLOGY

- Select a group of craft producers with a diverse range of craft products and production processes for a pilot programme on lean manufacturing principles.
- Conduct diagnostic assessments of production plants to check indicators for efficiency, quality, delivery times, defect rates, etc.
- Accurately map the production capabilities and order fulfilment capacity of each SMME operation in this initial pilot.
- Document the production practice quality capabilities of each SMME in the pilot.
- Identify appropriate process technology interventions and implement them.

MEASURABLE OUTCOMES

- Increase of 20% in collective production output of pilot projects.
- 30% productivity improvement.
- 10% employment growth in pilot companies within one year.

DURATION

Three years

9.7. Information and Communications Technology

ESTABLISHMENT STATUS	**NAMES OF ORGANISATIONS**
New and existing	**Private sector companies** **Tertiary Education Institutions (various)**

PRIMARY OUTPUT (OUTCOME)

- High-technology solutions for low-technology implementation.
- E-commerce capability.
- Access to local domestic and export markets.

KEY STRATEGIC OBJECTIVES

- Create easy access to satellite technology in rural areas.
- Generating economic value through the use of the Internet.
- Integration and streamlining of business processes.
- IP and IK protection.
- Improving telecommunications infrastructure.

ENABLING OUTPUTS

- ICT diffusion: promoting relevant incentive schemes and offering infrastructure solutions.
- ICT skills development and awareness.
- Development of portal for craft industry hosting industry database of craft locations and expertise, econometrics, policy and regulations.
- E-commerce and business-to-business technologies.
- By developing a grid manufacturing approach, create economies of scale in high-value niche craft markets.

METHODOLOGY

To be agreed

DURATION

Three years